SEMESTER - I

16IDT101			C	OM	ΜU	NICA	TIV	E ENGLISH			SEMEST	ER-I			
Marks	Internal	Internal 40 External 60 Total 100 Exam Hours													
Instruction	Hours/Week	L	2	Т	0	P/S	0		Cr	edits		2			

UNIT-1: LANGUAGE FOCUS

Technical vocabulary – formal phrases and idioms – homophones, homonyms, often mis-spelt words – conjunctions – formation of new words – irregular verbs – plurals, gender sounds, words ending with phobia, logy etc. Grammar: Finite and infinite verbs – transformation of sentences – simple, complex and compound – phrases and clauses – question forms – question tags – expression of cause and effect, purpose and function.

UNIT-2: READING & LISTENING

Extensive and Intensive reading – active and passive reading – eye reading and visual perception – reading for a purpose – speed reading – reading with expression – story telling – critical and analytical reading – Listening to debates and discussions for making suitable responses.

UNIT-3: WRITING & SPEAKING

Cohesion and coherence in sentences and paragraphs – business letters of different kinds – report writing – writing strategies – writing comments, procedures, inferences, instructions and recommendations – writing articles.

Applied English Communication – Welcome address, vote of thanks, compeering, debates, role plays, demonstration of advertisements – group discussions – mock interviews and dialogues – checklist of making oral presentations – vocal communication techniques – voice, quality, volume, pitch, rate of delivery.

UNIT-4: HARD AND SOFT SKILLS

Personal attributes – verbal and non verbal communication – interpersonal abilities/ skills – empathy, leadership, good manners and sociability – problem solving – reasoning and flexibility – intrapersonal abilities – self communication – self control and self esteem.

UNIT-5: SOCIAL SKILLS

Facilitating interactions, understanding social roles – making a team – leading a team – dealing with different kinds of people and situations – emotional quotient and intelligent quotient – personality development – communication and body language, social etiquette –goal setting – determination, discipline and direction.

<u>References</u>

- Sasikumar.V. and P.V.Damija, "Spoken English", Tata Mc Graw Hill Publishing Corporation Ltd, New Delhi, 1997
- 2. Ashraf Rizvi M, Effective Technical Communication, Tata McGraw Hill, Delhi 2008
- 3. Stanton Nicky, "Mastering Communication", Mc Millan Master Series, London, 1996
- 4. Robert M Sherfield "Developing softskills", Dorling Kindersley (India)

16IDT102			F	HIST	ГО	RY O	F IN	TERIORS			SEMEST	ER-I			
Marks	Internal	Internal 40 External 60 Total 100 Exam Hours													
Instruction	Hours/Week	L	2	T	0	P/S	0		Cro	edits		2			

- To help the student understand the designs from Prehistoric Period to the Middle Ages.
- To know more on the Modern Movements in Interior design from the beginnings of 20th century.
- To allow students to learn from the rich heritage the elements of aesthetic design.
- To understand the construction techniques of the ancient times.
- To understand the skilled labor and the presence of the same in the olden days.
- To understand the same scene in the contemporary era and its challenges to execute the same finesse.

COURSE OUTCOME:

- 1. An understanding about the spatial and stylistic qualities associated with architecture.
- 2. An Understanding of architecture as an outcome of various social, political and economic upheavals, and as a response to the cultural and context.
- 3. The individual will be exposed to the present to the ancient day's comparison in techniques...
- 4. To use the techniques of the ancient times and to overcome the challenges faced by the same.
- 5. To respect the wide heritage that can be offered with respect to the various Architecture eras.
- 6. An understanding of the influences of lifestyle and culture of the respective times.

Unit I

Unit II

Origin and scope of Interior Design - Evolution of Interior Design as an independent profession

Origin and scope of Interior Design - Evolution of Interior Design as an independent profession through the ages - Definition of Interior Design - Overview of Interior Design in India

Unit III

Ancient Egyptian Period - Roman and Greek Styles - Medieval Period - Gothic and Renaissance

<u>Unit IV</u>

Baroque - European Rococo - Neo-Classicism - Art Deco Style - Art Nouveau - Minimalist - Industrial Bauhaus

Unit V

Traditional Styles - Islamic Period in India - Oriental Period - Vernacular Indian Styles

- 1. Francis D.K.Ching, Interior Design Illustrated, V.N.R. Pub. NY 1987.
- 2. Steport De Van Kness, Logan and Szebely, Introduction to Interior Design Macmillan Publishing Co., NY 1980.
- 3. Kathryn B.Hiesinger and George H.Marcus, Landmarks of twentieth Century Design; Abbey Ville Press, 1993.
- 4. Syanne Slesin and Stafford Ceiff Indian Style, Clarkson N.Potter, Newyork, 1990.
- 5. The Impulse to adorn Studies in traditional Indian Architecture. Editor Dr. Saranya Doshi, Marg Publications, 1982.

16IDP111		(CO	MP	UT	ER A	PPL	ICATIONS I			SEMEST	ER-I			
Marks	Internal	Internal 60 External 90 Total 150 Exam Hours													
Instruction	Hours/Week	L	Instruction Hours/Week L 1 T 0 P/S 4 Credits												

- To make them digitally strong in the design related software.
- To make them understand and realize beautiful presentations.
- Understand #D nuances related to this subject.
- To represent ideas using technology and to be update in the use of softwares.
- To introduce to basic features of Artificial intelligence
- To Use software that are related to to BIM

COURSE OUTCOME:

- 1. Ability to express using digital tools in the realm of visual composition, drafting.
- 2. Ability to express using digital tools 3D visualization and rendering
- 3. To be able to represent ideas digitally for client understanding.
- 4. To understand the design in 3d to ensure the elimination of design flaws when translated from 2 d
- 5. To understand BIM and its overall structure.
- 6. To induce digital drawing reading and performing capacity.

Unit I

Definition and basics of internet, Electronic mail, File Transfer protocol, The World wide Web, WWW Browsers, Uses of Internet and Blogging

Unit II

Use in creating technical documents and reports, Cost Estimates, Paper Presentations and Assignments. Suggested Software – MS Office, Open Office

Unit III

A complete hands-on drawing ,sketching and two dimensional art course with exercises related to Basic Design and Visual Arts. Suggested Software – Photoshop, Illustrator.

Unit IV

Exercises in photographic image enhancement and Artistic Applications. Suggested Software – Photoshop, Illustrator.

Unit V

Command windows – toolbars and menus – tool palettes. Create and modify objects: 2d commands to draw, edit and modify. Suggested Software - AutoCAD

- 1. Office 2007 All-in-One Desk Reference For Dummies (For Dummies (Computer/Tech)) by Peter Weverka
- 2. Special Edition Using Microsoft Office Word 2007 by Faithe Wempen (Paperback Jan 6, 2007)
- 3. Photoshop Elements 6 For Dummies (For Dummies (Computer/Tech)) by Barbara Obermeier and Ted Padova
- 4. Adobe Photoshop CS4 Classroom in a Book by Adobe Creative Team (Paperback Nov 20, 2008)
- 5. Illustrator CS for Dummies by Ted Alspach (Paperback Oct 13, 2003)
- 6. AutoCAD 2006 The Official Reference Guide by AutoDesk

16IDP112				A	AR'	ΓΑΝ	D CF	RAFT I			SEMEST	ER-I			
Marks	Internal	Internal 40 External 60 Total 100 Exam Hours													
Instruction	Hours/Week														

- To encourage a critical orientation to design thinking and action.
- To understand the word critical meaning that everything must be open to enquiry and alternative view point.
- By design thinking and action it means that the process if observation and study of natural and manmade objects and systems,
- Ideation, free exploration, and development of personal skills and attitudes.
- To bring a creative interactive movement of students that will mould the respective skill.
- Skill based learning with adept technology support for the same.

COURSE OUTCOME:

- 1. The students are exposed to various mediums, techniques and tools.
- 2. The students gain mastery in sketching, visualizing and expression through manual drawing.
- 3. Sensitized to culture, craft and context.
- 4. Skill Development in Handling Materials and in Making Products
- 5. To be updated to the art world and to hone a skill that precedes the student in an overall development.
- 6. To imbibe qualities of confidence and orator ship

Unit I to V

Exploration in mixed media & collage to convey specific theme and meaning. Analytical Studies will be undertaken in two and three dimensions using various media.

Use of hand tools and materials: working with wood, metals, plaster, plastic, foam boards etc; techniques, safety & practice. Suggestive exercises are:

- Type 1: Making mount board mobiles employing cubes cuboids, pyramid, cylinder and cones.
- Type 2: Space frame models using match sticks straw, steel wires, bamboo splits.
- Type 3: Texture applicability to murals and interior decoration.

Making craft objects and sculpture using different materials such as clay, metal, etc.

- 1. Design Methods (Architecture) (Paperback), by John Chris Jones (Author).
- 2. Basics Design Ideas (Paperback) by Bert Bielefeld (Author), Sebastian El khouli (Author).
- 3. Design Drawing, Francis D. K. Ching.
- 4. The Nature of Design, Peg Faimon & John Weigand.
- 5. Foundations of Art and Design (Paperback) by Alan Pipes (Author)
- 6. John W.Mills The Technique of Sculpture, B.T.Batsford Limited, New York Reinhold Publishing Corporation, London, 1966.
- C.Lawrence Bunchy Acrylic for Sculpture and Design, 450, West 33rd Street, New York, N.Y.10001, 1972.
- 8. The Elements of Graphic Design: Space, Unity, Page Architecture, and Type (Paperback) by Alexander W. White (Author)
- 9. Geometry of Design: Studies in Proportion and Composition, Kimberly Elam.David Gibson

16IDS121				IN	TE	RIOI	R DES	SIGN I			SEMEST	ER-I			
Marks	Internal	Internal160External240Total400Exam Hours													
Instruction	Hours/Week	L	2	T	0	P/S	10		Cre	edits		7			

- To develop an understanding of various degrees of enclosures and various types of relationship between spaces.
- Understanding of the various effects that could be created by manipulating the enclosing elements such as walls, roof etc.
- To understand the design proximity and relation of spaces.
- To understand the translation of the drawing from board to reality and unification of the spaces.
- To understand the basic concepts for the size of the project.
- Develop an eye for design thinking that will encourage students to explore their creative capacities.

COURSE OUTCOME:

- 1. An understanding of the qualities of different elements as well as their composite fusions.
- 2. An ability to engage and combine the elements of design in spontaneous as well as intentional ways in order to create desired qualities and effects.
- 3. Development of required skills observation / analysis / abstractions / interpretation / representations / expressions through models and drawings.
- 4. To analyze the pre data of the concepts and to introduce design solutions using a creative approach.
- 5. To be able to describe an understanding that is both in representation and verbally present the same.
- 6. To update and to introduce various other methodologies to enhance the skill set.

Unit I to V

Design Thinking: What is Design? Changing Role of the Designer; Route map of the Design Process; Components of Design Problems; Measurement, Criteria & Judgment in Design; Types and Styles of Thinking – Creative thinking, Guiding Principles.

Introduction to Elements of design.

Properties, qualities, and characteristics of (i) line, (ii) direction, (iii) shape, (iv) size, (v) texture, (vi) space (vii) time and motion (viii) value and (vii) colour. Exercises involving the same

Exploration in mixed media & collage to convey a specific theme and meaning.

Analytical Studies to be undertaken in two and three dimensions using various materials and tools.

The principles of design relationships/ Composition – Unity & Harmony, Balance, Scale & Proportion, Contrast and Emphasis, and Rhythm. Exercises involving the same.

Lecture introduction into the discipline of interior design and the transformation from basic design to interior design - Placing Interiors (Building, Site, Orientation, Climate, City and Landscape); History & Precedent; Materials & Construction; Representation and Realization.

- 1. The Fundamentals of Architecture (Fundamentals (Ava)) (Paperback) by Lorraine Farrelly (Author)
- 2. Francis D.K.Ching Architecture Form Space and Order Van Nostrand Reinhold Co.,
- 3. Design Methods (Architecture) (Paperback), by John Chris Jones (Author).
- 4. How Designers Think, Fourth Edition: The Design Process Demystified (Paperback) by Bryan Lawson.
- 5. Basics Design Ideas (Paperback) by Bert Bielefeld (Author), Sebastian El khouli (Author).
- 6. Graphic Thinking for Architects, Paul Laseau.
- 7. Design Drawing, Francis D. K. Ching.
- 8. The Nature of Design, Peg Faimon & John Weigand.
- 9. Foundations of Art and Design (Paperback) by Alan Pipes (Author)
- 10. John W.Mills The Technique of Sculpture, B.T.Batsford Limited, New York Reinhold Publishing Corporation, London, 1966.
- 11. C.Lawrence Bunchy Acrylic for Sculpture and Design, 450, West 33rd Street, New York, N.Y.10001, 1972.
- 12. The Elements of Graphic Design: Space, Unity, Page Architecture, and Type (Paperback) by Alexander W. White (Author)
- 13. Geometry of Design: Studies in Proportion and Composition, Kimberly Elam. David Gibson

16IDS122	INTER	IOR	MA	TE	RL	ALS A	AND (CONSTRUC	CTION	N I	SEMEST	ER-I
Marks	Internal	80	80 External 120 Total 200 Exam Hours									
Instruction Hou	rs/Week	L	2	T	0	P/S	5		Cred	dits		4

- Understanding the basic components of the buildings that envelope a small buildings
- Understanding the different types in each element and different treatments for the same.
- Understanding function of each component of a building like foundation, walls, beams, column, and roofs.
- Understanding simple roof & floor finishes.
- To understand the primary basics of the loading in a structure and the distribution of the load
- To understand the composition and properties of the materials.

COURSE OUTCOME:

- 1. Students learn Interior construction details using naturally occurring building materials.
- 2. Student are taught to judge the structure before making any structural changes required in renovation.
- 3. Working format with for materials such as stone, bamboo, mud and lime through drawing as well as doing a literature or live case study.
- 4. Students are to submit drawing plates comprising of technical plan, elevation and section along with sketches and details showing method of construction.
- 5. Students will be honing the skills of technical drawings and their representations.
- 6. Students will be able to use this material knowledge during construction and can find best materials suited for apt activities.

Unit I

Overview of all building materials – Application of Materials in Construction – Traditional Materials – Modern Materials – Recent Developments in the Building Material Industry – Sample collection of building materials/brochures

Unit II

Stone: Classification of rocks - Building stones - their uses –physical properties - brief study of tests for stone – deterioration - preservation of stone - various stone finishes - cutting and polishing of granites.

Unit III

Mud as a building material - Soil stabilization, soil blocks - Cast- in-situ walls - flooring - roofing - plastering.

Bamboo, Casuarina, Coconut, palm, Hay, Coir, Jute – properties and uses.

Types of foundations - walls - simple roof trusses floors for rural structures

Lime – types - properties and uses – Manufacturing process – Mortar: functions – requirements - mixes.

Unit IV

Bricks - brief study on manufacture of bricks – properties and uses - suitability - types of bricks - uses in buildings, structural tiles, ceramics, terracotta – properties and uses.

Unit V

Functional requirements of a building and its components - Drawings of foundations, plinth, superstructure, roofing. Openings: Doors, Windows and Ventilators.

- 1. Parker, Harry, 1957, Materials and Methods of Architectural Construction, John Wiley & Sons, London
- 2. S.C.Rangwala, Engineering Materials, Charotar Publishing House, Anand, 1997.
- 3. Understanding Buildings: A Multidisciplinary Approach (Paperback) by Esmond Reid
- 4. R.J.S.Spencke and D.J.Cook, Building Materials in Developing Countries, John Wiley and Sons, 1983.
- 5. HUDCO All you want to know about soil stabilized mud blocks, HUDCO Pub., New Delhi, 1989.
- 6. UNO Use of bamboo and reeds in construction UNO Publications.
- 7. Rural Construction NBO, New Delhi

16IDS123			IN	TE	RI	OR G	RAP]	HICS I			SEMEST	ER-I
Marks	Internal	Internal60External90Total150Exam Hours										
Instruction Hou	ırs/Week	L	1	T	0	P/S	5		Cred	dits		3

- To help students to learn &understand the techniques of various methods of drawing
- To make them understand the use of colors & their effects in drawings.
- To understand various geometrical shapes.
- To be able to scale geometry and understand the sizes.
- To understand sciography and its representation.
- To be able to improve different lettering.

COURSE OUTCOME:

- 1. Ability to construct the 3d views and perspective drawings of the Interiors
- 2. Understanding of advanced documentation and measured drawing techniques.
- 3. Ability to express design in all dimensions
- 4. Ability to improve drawing skills.
- 5. To be able to understand the various measurements of the drawings.
- 6. To be able to express and exhibit drawings to the best understanding for professional practice.

Unit I

Freehand drawing: Study of form and proportion - study of light and shade - Drawing of simple and natural elements

Unit II

Freehand drawing: Parts of building environment - exterior and interior views- landscape

Unit III

Measured Drawing: Simple objects to scale such as furniture, entrances, building elements and details of interior components

Unit IV

Orthographic Projection: Scales - construction of planes, curves, circles, tangents, regular polygons - projection of points, lines and planes

Unit V

Orthographic Projection: Projection of Solids, Frustums - Section of Solids - Interpenetration of solids and true shape of sections

- 1. Paul Laseau, Freehand Sketching: An Introduction.
- 2. Robert S. Oliver, The Complete Sketch, Van Nostrand Reinhold, New York, 1989.
- 3. Tokyo Musashino Academy of Art Introduction to Pencil Drawing, Graphic Shaw Publishing Co. Ltd., Japan, 1991.
- 4. Freehand Drawing for Architects and Interior Designers (Paperback) by Magali Delgado Yanes (Author), Ernest Redondo Dominguez (Author)
- 5. Alwyn Cranshaw, Learn to paint with Water colours, Acrylic colours, Boats and Harbours, Sketch, Still life, landscapes, William Collins Sons and Co. Ltd., London, 1981.
- 6. IH. Morris, Geometrical Drawing for Art Students Orient Longman, Madras, 1982.
- 7. Francis D. K. Ching, Architectural Graphics, Van Nostrand Rein Hold Company, New York, 1964.
- 8. C. Leslie Martin, Architectural Graphics, The Macmillan Company, New York, 1964.
- 9. Architectural Drawing: A Visual Compendium of Types and Methods (3rd edition) by Rendow Yee

16IDT201		CC	NT	EN	1P(ORAF	RY IN	TERIORS			SEMEST	ER-II
Marks	Internal	Internal40External60Total100Exam Hours										
Instruction Hou	ırs/Week	L	3	T	0	P/S	0		Cred	dits		3

- To help the student understand the designs from the industrial age to the present information age.
- To know more on the Modern Movements in Interior design from the beginnings of 20th century.
- To help students acquire knowledge of the current happenings and the classification of the importance of a particular information.
- To be undertsnad and execute various styleslike modernism, post modernism, contemporary, etc.
- To be able to understand the concepts of minimalism, and international design style.
- To be able to design a particular style of the interiors based on these understandings.

COURSE OUTCOME:

- 1. An awareness of the spread and varied later directions of modern interiors across the world.
- 2. An understanding of interior production from the 2060s as driven by large scale changes across the world
- 3. Familiarity with contemporary forces and directions in interiors across the world.
- 4. To be fore thought and to be able to design for the future with an understanding of the recent history.
- 5. To be able to appreciate and be a critic to all works of famous architects under each movement.
- 6. To understand different regions and its interior design style to be able to regain global cultures understanding.

Unit I EVOLUTION OF MODERN INTERIORS

Reasons for the evolution of Modern Interiors, origins-Neo Classicism. Industrial revolution and its impact – Emergence of new building typologies, New Materials and Technologies- steel, glass and concrete.

Unit II REVIEWING INDUSTRIALISATION

Arts & Crafts movement in Europe and America; Art nouveau, and the works of Horta, Guimard, Gaudi and Macintosh; Organic Architecture -Early works of F.L.Wright. Chicago school; Art deco.

<u>Unit III</u> EVOLUTION OF MODERNISM, POST MODERNISM AND CRITIQUE

Viennese secession, Adolph Loos and debates on ornamentation; Futurism, Expressionism works of Mendelssohn & Taut, Cubism, Constructivism, De stijl and their influence on Architecture. Bauhaus school & Walter gropius, Modernism and the International style, Brutalism, Deconstructivist.

Unit IV WESTERN INTERIOR ARCHITECTURE

Ideas and works of Richard Meier (Smith House, Connecticut and Getty Centre, Brent Wood, LosAngeles), Charles Moore (Architect's Own House at Orinda and Piazza d'Italia, New Orleans), Bernard Tschumi (Kyoto Railway Station Project and Parc de la Villete, Paris), Frank Gehry (AeroSpace Museum, Santa Monica and Guggenheim Museum, Bilbao), Norman Foster (Hong Kong Shanghai Bank and Renault Distribution Centre, Swindon, England).

<u>Unit V</u> WESTERN INTERIOR ARCHITECTURE

Zaha Hadid (The Peak Club, HongKong and IBA Housing Block 2, West Berlin), Daniel Leibskind(Jewish Museum, Berlin and World Trade Centre, New York), Rem Koolhas(Dance Theatre, The Hague and Netherlands Sports Museum), Santiago Calatrava (Lyon- Satolas Railway Station and Olympic Stadium at Athens), Renzo Piano (Pompidou Centre, Paris).

- 1. Morgan, Ann Lee & Taylor Colin, 1987, Contemporary Architecture, 2nd Edition, St.James Press
- 2. Sarabjit Bahga. S, Modern Architecture in India,
- 3. Ar. Pramod Beri, 2009, Form follows feeling, Anjali Prakashan, New Delhi

16IDT202				H	UM	AN V	ALU	TES			SEMEST	ER-II
Marks	Internal	Internal40External60Total100Exam Hours										
Instruction Hou	ırs/Week	L	2	T	0	P/S	0		Cred	lits		2

Unit I HUMAN VALUES

Self discipline, Concern for others, Empathy, Kindness, Valuing time, Self Esteem, Dignity, Caring and Sharing, Honesty, Cooperation and Commitment, Responsible citizenship,

Unit II CHARACTER BUILDING

Self-awareness, Self-confidence, Courage, Team work, Adjustments, Accepting differences, Conflict resolution, Assertiveness, Critical thinking, Decision making, Emotional coping skills.

Unit III DILEMMA OF THE YOUTH

Peer pressure, Mobile Usage, Influence of media, Alcoholism, Smoking & Substance abuse, Road accidents, Suicidal tendency.

Unit IV HEALTH AND WELLNESS

Personal hygiene, Fitness and health: Components and benefits of fitness, Importance of yoga and meditation, Balanced nutritional diet.

Sex education: Infatuation, Healthy life style choices, Sexually Transmitted Diseases, HIV/AIDS awareness.

Unit V PSYCHO – SOCIAL INTERVENTION

Psychotherapy: Supportive therapy, re-educative and re-constructive

References:

1. Standard study material / as prescribed by the concerned course teacher

16IDP211		CC	M	PUT	EF	R API	PLICA	ATIONS II			SEMEST	ER-II	
Marks	Internal	Internal60External90Total150Exam Hours											
Instruction Hou	ırs/Week	L	1	T	0	P/S	4		Cred	lits		3	

- To make them digitally strong in the design related software.
- To make them understand and realize beautiful presentations.
- Understand #D nuances related to this subject.
- To represent ideas using technology and to be update in the use of softwares.
- To introduce to basic features of Artificial intelligence
- To Use software that are related to to BIM

COURSE OUTCOME:

- 1. Ability to express using digital tools in the realm of visual composition, drafting.
- 2. Ability to express using digital tools 3D visualization and rendering
- 3. To be able to represent ideas digitally for client understanding.
- 4. To understand the design in 3d to ensure the elimination of design flaws when translated from 2 d
- 5. To understand BIM and its overall structure.
- 6. To induce digital drawing reading and performing capacity.

Unit I

Command programming – modifying commands, selection sets, Zoom, accurate inputs.

Introduction to Layers, Texts and Scale. Suggested Software - AutoCAD

Unit II

Command programming - transparent overlays, hatching utilities, assigned color and line types.

Unit III

Use of multiline, style, block, symbols and libraries.

Unit IV

Advance exercise in 2D drafting of various complex building drawings, incorporating Linetypes and Linetypes Styles.

Unit V

XREFS, Tables, Modifying and creating Dimensions and customizing AutoCAD; Understanding concepts of Vport, concept of object linking, and editing session.

Suggested Software - AutoCAD

<u>References</u>

- 1. MS Office 2010 Product Guide by Microsoft
- 2. First Look Microsoft Office 2010, Katherine Murray, Microsoft
- 3. Sketchup 7 User Self help Tutorials and Video Tutorials
- 4. Cherly R. Shrock Beginning AUTOCAD. New Age International Publishers. New Delhi. 2006.
- 5. AutoCAD architectural users guide Autodesk Inc., 1998.
- 6. AutoCAD 2011 User Manual, Autodesk 2011.

16IDP212				AR	T A	ND (CRAF	T II		SEMEST	ER-II		
Marks	Internal	Internal40External60Total100Exam Hours											
Instruction Hou	ırs/Week	L	1	T	0	P/S	4		Cred	lits	3		

- To encourage a critical orientation to design thinking and action.
- To understand the word critical meaning that everything must be open to enquiry and alternative view point.
- By design thinking and action it means that the process if observation and study of natural and manmade objects and systems,
- Ideation, free exploration, and development of personal skills and attitudes.
- To bring a creative interactive movement of students that will mould the respective skill.
- Skill based learning with adept technology support for the same.

COURSE OUTCOME:

- 1. The students are exposed to various mediums, techniques and tools.
- 2. The students gain mastery in sketching, visualizing and expression through manual drawing.
- 3. Sensitized to culture, craft and context.
- 4. Skill Development in Handling Materials and in Making Products
- 5. To be updated to the art world and to hone a skill that precedes the student in an overall development.
- 6. To imbibe qualities of confidence and orator ship.

Unit I to V

Exploration in digital and physical media to convey specific theme and meaning. Analytical Studies of the built forms will be undertaken in three dimensions using various media.

Use of digital and hand tools and materials: working with wood, metals, plaster, plastic, foam boards etc; techniques, safety & practice. Suggestive exercises are:

Type 1: Making complex 3D models

Type 2: Applying advanced rendering techniques to the 3D models.

Type 3: Rendering techniques

- 1. Design Methods (Architecture) (Paperback), by John Chris Jones (Author).
- 2. Basics Design Ideas (Paperback) by Bert Bielefeld (Author), Sebastian El khouli (Author).
- 3. Design Drawing, Francis D. K. Ching.
- 4. The Nature of Design, Peg Faimon & John Weigand.
- 5. Foundations of Art and Design (Paperback) by Alan Pipes (Author)
- 6. John W.Mills The Technique of Sculpture, B.T.Batsford Limited, New York Reinhold Publishing Corporation, London, 1966.
- C.Lawrence Bunchy Acrylic for Sculpture and Design, 450, West 33rd Street, New York, N.Y.10001, 1972.
- 8. The Elements of Graphic Design: Space, Unity, Page Architecture, and Type (Paperback) by Alexander W. White (Author)
- 9. Geometry of Design: Studies in Proportion and Composition, Kimberly Elam.David Gibson

16IDS221			Ι	NTI	ERI	OR I	DESIG	GN II			SEMEST	ER-II	
Marks	Internal	Internal160External240Total400Exam Hours											
Instruction Hou	ırs/Week											7	

- To develop an understanding of various degrees of enclosures and various types of relationship between spaces.
- Understanding of the various effects that could be created by manipulating the enclosing elements such as walls, roof etc.
- To understand the design proximity and relation of spaces.
- To understand the basic concepts for the size of the project.
- To develop understanding of the scale, function and options existing when designing small-scale spaces in residences such as toilets, kitchens, living, bedrooms etc.
- Development of ideas with regard to false ceiling, wall paneling, flooring,• floor coverings, curtains, windows, doors and other elements of residential interiors.

COURSE OUTCOME:

- 1. An understanding of the qualities of different elements as well as their composite fusions.
- 2. An ability to engage and combine the elements of design in spontaneous as well as intentional ways in order to create desired qualities and effects.
- 3. Development of required skills observation / analysis / abstractions / interpretation / representations / expressions through models and drawings.
- 4. To analyze the pre data of the concepts and to introduce design solutions using a creative approach.
- 5. To be able to describe an understanding that is both in representation and verbally present the same.
- 6. To update and to introduce various other methodologies to enhance the skill set.
- 7. The students shall understand the basic functional aspect of designing simple building type and its relevant spatial organization.
- 8. The students shall be learn to reciprocate and sensitize the design/concept to the environment and the design skill of the project

Unit I to V

Design Process: Evolution from Program and Conditions to Concept & Design - Graphical Representation of the Process. Design Strategies and Methods. Designing in Context; Design & Function; Constituents of Design; Working with materials and Structures; Arriving at Ideas.

Horizontal movement - single bay - passive energy type spaces. Design Exercises shall be simple functional units with universal access compliance such as: Toilet for a physically handicapped person. Hostel room, bed room, kitchen, Shop, Workshop, pavilions, snack bar.

Design problems involving simple space organization. Design Exercises shall be multiple spaces and understanding their inter-relationships, such as: Residence, petrol bunk, fire station, police station, Cottage for an elderly couple

The study of space standards and anthropometrics related to each problem. Anthropometry as related to physically handicapped and elderly persons is required to be studied. Different Techniques shall be used for presentation.

- 1. The Fundamentals of Architecture (Fundamentals (Ava)) (Paperback) by Lorraine Farrelly (Author)
- 2. Francis D.K.Ching Architecture Form Space and Order Van Nostrand Reinhold Co.,
- 3. Design Methods (Architecture) (Paperback), by John Chris Jones (Author).
- 4. How Designers Think, Fourth Edition: The Design Process Demystified (Paperback) by Bryan Lawson.
- 5. Basics Design Ideas (Paperback) by Bert Bielefeld (Author), Sebastian El khouli (Author).
- 6. Graphic Thinking for Architects, Paul Laseau.
- 7. Design Drawing, Francis D. K. Ching.
- 8. The Nature of Design, Peg Faimon & John Weigand.
- 9. Foundations of Art and Design (Paperback) by Alan Pipes (Author)
- 10. John W.Mills The Technique of Sculpture, B.T.Batsford Limited, New York Reinhold Publishing Corporation, London, 1966.
- 11. C.Lawrence Bunchy Acrylic for Sculpture and Design, 450, West 33rd Street, New York, N.Y.10001, 1972.
- 12. The Elements of Graphic Design: Space, Unity, Page Architecture, and Type (Paperback) by Alexander W. White (Author)
- 13. Geometry of Design: Studies in Proportion and Composition, Kimberly Elam. David Gibson

16IDS222	INTERI	OR I	MA	TE	RIA	ALS A	ND (CONSTRUC	TION	II	SEMEST	ER-II	
Marks	Internal	80		Ext	tern	al	120	Total	Total 200 Exam Hours				
Instruction Hou	ırs/Week	L	L 1 T 0 P/S				6		Cred	lits		4	

- Understanding the basic components of the buildings that envelope a small buildings
- Understanding the different types in each element and different treatments for the same.
- Understanding function of each component of a building like foundation, walls, beams, column, and roofs.
- Understanding simple roof & floor finishes.
- To understand the primary basics of the loading in a structure and the distribution of the load
- To understand the composition and properties of the materials.

COURSE OUTCOME:

- 1. Students learn Interior construction details using naturally occurring building materials.
- 2. Student are taught to judge the structure before making any structural changes required in renovation.
- 3. Working format with for materials such as stone, bamboo, mud and lime through drawing as well as doing a literature or live case study.
- 4. Students are to submit drawing plates comprising of technical plan, elevation and section along with sketches and details showing method of construction.
- 5. Students will be honing the skills of technical drawings and their representations.
- 6. Students will be able to use this material knowledge during construction and can find best materials suited for apt activitie

Unit I BRICKS AND CLAY PRODUCTS - CONSTRUCTION

Structural members in brickwork – Brick piers, footings, load bearing walls.

Reinforced brick masonry - Arches - Lintels - Corbels - copings.

Unit II BRICKS AND CLAY PRODUCTS - CONSTRUCTION

Hollow clay blocks - for walls - partitions - roofs.

Roofing - Flat Roofs - Terrace roofs - Sloping roofs.

Unit III TIMBER AND ALLIED PRODUCTS

Softwood and hardwood - Secondary timber - Physical properties and uses - Defects, Conversion, Seasoning, decay and preservation of timber - Fire retardent treatment, anti-termite treatment.

Industrial timbers - plywood, block board, particle board, fiber boards.

Manufacture and uses - current developments.

<u>Unit IV</u> TIMBER CONSTRUCTION – DOOR, WINDOWS AND PANELLING

Drawings of timber joinery for Windows, doors, ventilators. Timber partitions, paneling, false ceiling, fixed partitions, sliding, folding, top hung bottom rested false ceiling - wall paneling.

Unit V TIMBER CONSTRUCTION – STAIRCASE AND TRUSSES

Timber staircases - Designed staircase - timber trusses - Lean to - close couple - Kingpost - Queen post - Trusses. Timber floors - timber built-in furniture.

- 1. Parker, Harry, 1957, Materials and Methods of Architectural Construction, John Wiley & Sons, London
- 2. S.C.Rangwala, Engineering Materials, Charotar Publishing House, Anand, 1997.
- 3. Understanding Buildings: A Multidisciplinary Approach (Paperback) by Esmond Reid
- 4. R.J.S.Spencke and D.J.Cook, Building Materials in Developing Countries, John Wiley and Sons, 1983. Don A.Watson, Construction Materials and Processes, McGraw Hill Co., 1972.
- 5. W.B.Mckay, 'Building Construction', Vol.1, 2, 3 Longmans, U.K. 1981.
- 6. Alanwerth, Materials, The Mitchell Pub. Co. Ltd., London, 1986.
- 7. R.Chudleu, 'Building Construction Handbook', British Library Cataloguing in Publication Data, London, 1990.

16IDS223		INTERIOR GRAPHICS II SEMESTE												
Marks	Internal	60		Ext	tern	al	90	Total	Total 150 E			6		
Instruction Hou	ırs/Week	L	1 T 0 P/S				4		Cred	dits		3		

- To help students to learn &understand the techniques of various methods of drawing
- To make them understand the use of colors & their effects in drawings.
- To understand various geometrical shapes.
- To be able to scale geometry and understand the sizes.
- To understand sciography and its representation.
- To be able to improve different lettering.

COURSE OUTCOME:

- 1. Ability to construct the 3d views and perspective drawings of the Interiors
- 2. Understanding of advanced documentation and measured drawing techniques.
- 3. Ability to express design in all dimensions
- 4. Ability to improve drawing skills.
- 5. To be able to understand the various measurements of the drawings.
- 6. To be able to express and exhibit drawings to the best understanding for professional practice

Unit I MEASURED DRAWING

Measured drawing of simple objects (like furniture, entrance gates, etc.) and building components (like columns, cornice, door, window, etc.). Detailed measured drawing/documentation of simple monument or building.

Unit II PERSPECTIVE

Perspective projection concepts, Types of Perspective views, Picture plane, vanishing points, station point, horizon, cone of vision, line of vision, etc. Perspective Projection of simple & complex geometrical forms. Two point perspective of simple objects, outdoor and indoor view of a building, etc. One point and three point perspective of interiors, Human Figures, Landscape elements and Vehicles in Perspective

Unit III SCIOGRAPHY

Principles of shades and shadows - Shadows of basic shapes and solids; Shadows of architectural elements, etc; Shadows of circular solids; Shadows of buildings, etc.

Unit IV RENDERING TECHNIQUES

Colour Pencils Rendering, Water Colour Rendering, Pen & Ink Rendering, Marker Rendering Techniques, Using Digital & Mixed Media Rendering Techniques, Free hand drawings

Unit V GRAPHICAL PRESENTATION

Visual representation of the design scheme – interior and exterior perspective views – shades and shadows – use of various rendering techniques.

- 1. Francis Ching, Architectural Graphics, Van Nostrand and Reinhold Company, New York, 1975.
- 2. Edward J.Muller, Jemes G. Fauselt, Philip A. Graw Architecture Drawing and Light Construction Prentice hall Publishers Columbus. 1999.
- 3. Ernest Norling, Perspective drawing, Walter Fostor Art Books, California, 1986.
- 4. Bernard Alkins 147, Architectural Rendering, Walter Foster Art Books, 1986.
- 5. Learn to paint with Water Colours, Acrylic colours, Boats and Harbours, Sketch, Still life, landscapes. Author: Alwyn Cranshaw, Publisher: William Collins Sons & Co. Ltd., London, 1981.
- 6. Architectural Rendering, A Technique of Contemporary Presentation, Author: Albert O. Halse, Publisher, Mc Graw Hill Book Company, New York, 1972.
- 7. Elisabetta Drudi, Figure Drawing for Fashion Design, The Pepin Press Singapore. 2001.
- 8. K. Venugopal, Engineering Drawing and Graphics + AutoCAD, New Age International Publishers, New Delhi, 2007.
- 9. Kendra Schank Smith, Architects' Drawings, Architectural Press- An imprint Elservier Burlington 2006.

SEMESTER-3

16IDT301		HIS	TO	RY	OI	INT	ERIC	OR DESIGN			SEMESTI	ER-III
Marks	Internal	40		Ext	tern	al	60	Total	100		Exam Hours	3
Instruction Hou	ırs/Week	L	3	T	0	P/S	0		Cred	dits		3

COURSE OBJECTIVE:

- To help the student understand the designs from Prehistoric Period to the Middle Ages.
- To know more on the Modern Movements in Interior design from the beginnings of 20thcentury.
- To allow students to learn from the rich heritage the elements of aesthetic design.
- To understand the construction techniques of the ancient times.
- To understand the skilled labor and the presence of the same in the olden days.
- To understand the same scene in the contemporary era and its challenges to execute the same finesse.

COURSE OUTCOME:

- 1. An understanding about the spatial and stylistic qualities associated with architecture.
- 2. An Understanding of architecture as an outcome of various social, political and economic upheavals, and as a response to the cultural and context.
- 3. The individual will be exposed to the present to the ancient day's comparison in techniques...
- 4. To use the techniques of the ancient times and to overcome the challenges faced by the same.
- 5. To respect the wide heritage that can be offered with respect to the various Architecture eras.
- 6. An understanding of the influences of lifestyle and culture of the respective times.

Unit – I:

Elements of style and determinants of Interior environments in Egypt, Mesopotamia, Babylonia, Chinese, Japan, Greece, Rome and Europe in Early Christian, Romanesque, Gothic, Byzantine, Renaissance, Baroque and Rococo periods.

Unit – II:

An overview of Victorian, Elizabethan, art Nouveau arts and crafts, Cubism, surrealism, Romanticism etc. Forces of industrialization in Europe, changes in social structure, production systems, changes in technology and its impact on the life styles, arts and crafts and interior environments.

Unit – III:

Elements of style, interior environment, furniture etc in Jammu and Kashmir, Southern India, Gujarat, Rajasthan, Himachal Pradesh, states of North eastern India, Maharastra, Uttar Pradesh, Orissa etc.

Unit – IV:

History of modern movement in interior Design and architecture – developments of modern movements – various fields of design affecting interior ambiences directly – international modernism, regionalism and concerns with vernacular etc.

Unit – V:

Designers and their works with respect to interior architecture and interior elements of design. Contemporary expressions of styles and art forms.

References

John F. Pile, A history of interior design, 2nd edition, Laurence King Publishing, 2005.

Jeannie Ireland, History of Interior Design, air child publications, illustrated ed., 2009.

Elaine, Michael Dywer, Christopher Mackinnon, Norman A. J. Berisford Denby, A History of Interior Design, Rhodec International, 1983.

Giedion Sigfried, Space, Time and Architecture: The growth of a new tradition, 4th ed. Harvard University Press, Cambridge, 1962.

Tadgell Cristopher, The History of Architecture in India: From the dawn of civilization to the End of the Raj, Om Book Service, New Delhi, 1990.

Rowl Bejamin. Art and Architecture of India.

16IDT302		SPACE PLANNING SEMESTE												
Marks	Internal	40		Ext	ern	al	60	Total	100		Exam Hours	3		
Instruction Hou	ırs/Week	L	2 T 0 P/S				0		Cred	lits		2		

- To develop an understanding of various degrees of enclosure, various types of relationship between spaces.
- Understanding of the various effects that could be created by manipulating the enclosing elements such as walls, roof etc.
- To understand design with relation to a human being with respect to size, shape, and color.
- To understand a human bodies and its various movements and to accommodate the same into design standards.
- To understand spatial parameters with respect to the function and implications inflicted regarding the same.
- To introduce a self to design methodology..

COURSE OUTCOME:

- 1. The students understand the relationship of human being with its environment and implement the study into design.
- 2. The students are taught to be able to design spaces based on patterns of circulation, proximity and levels of privacy zones.
- 3. The students understand the different postures and positions with dimensions of the human body and will be able to recognize activities and relate the need of human measurements in the design principles.
- 4. To bring a relation with design principles and the human being using the design principle.
- 5. To be able to create a project in direct relation to this subject and hence be able to apply theoretical knowledge into practical construction
- 6. To introduce the student to visual analyses and hence be practically well equipped.

Unit –I

Basic anthropometrics – average measurements of human body in different postures – its proportion and graphic representation, application in the design of simple household and furniture.

UNIT-II

Role of mannequins in defining spatial parameter of design. Basic human functions and their implications for spatial planning. Minimum and optimum areas for various functions. Preparing user profile, bubble and circulation diagrams.

Unit –III

Introduction to design methodology. Detailed study of spaces such as living, dining, bedrooms, kitchen, toilet etc. including the furniture layout, circulation, clearances, lighting and ventilation, etc. Case study of existing house and analysis of the spaces.

Unit – IV

Visual analysis of designed spaces noted for comfort and spatial quality; analysis of solid and void relations, positive and negative spaces.

UNIT-V

Integration of spaces and function in the design of bus shelter, milk booth, watchman's cabin, traffic police kiosk, flower stall, ATM center, etc.

Note: In the end exam, which is a viva-voce, the students have to present the entire semester's work for assessment.

References:

Karlen Mark, Space planning Basics, Van Nostrand Reinhold, New York, 1992.

Joseph D Chiara, Julius Panero, & Martin Zelnick, Time Saver standards for Interior Design & space planning, 2nd edition, Mc-Graw Hill professional, 2001.

Francis.D. Ching & Corky Bingelli, Interior Design Illustrared, 2nd edition, Wiley publishers, 2004. Julius Panero & Martin Zelnick, Human Dimension & Interior Space: A source book of Design Reference standards, Watson – Guptill, 1979.

Karlen Mark, Kate Ruggeri & Peter Hahn, Space Planning Basics, Wiley publishers, 2003.

16IDT303	F	FUNDAMENTALS OF STRUCTURES SEMESTE												
Marks	Internal	40		Ext	ern	al	60	Total	Total 100 F			3		
Instruction Hou	ırs/Week	L	L 3 T 0 P/S			0		Cred	lits		3			

- To get introduced to basic structural members in timber and steel.
- To give knowledge to design different timber components in a building.
- To enable an understanding of the types, efficiency and strength, advantages and disadvantages of rivet joints
- To enable an understanding of the types, efficiency and strength, advantages and disadvantages of welded joints
- To enable the design of tension (beams) and compression (columns) steel members in a building under different conditions.
- To Understand the concept of Structural system of Steel & Timber

COURSE OUTCOME:

- 1. Student will understand about Various Timber sections
- 2. Student will understand about the design timber beams and columns by applying the code provisions.
- 3. Student will understand about the Steel Sections and its usage.
- 4. Student will be able to design steel joints for maximum efficiency and strength.
- 5. Student will be able to design tension and compression members for different conditions by applying the code provisions.
- 6. Student will be able to design different types of laterally unsupported & supported beams for different conditions.

Unit – I:

Introduction to built elements – study of built elements in the interiors with respect to materials used. Basic construction methods and general specifications. General types and classification of different types of buildings: overview of different functional, structural and architectural elements.

Unit – II:

Introduction to basic structural systems, elements of structure, their functions and behavior, beams, slabs, columns, walls, foundations, bearing wall systems, trusses, rigid frames, linear and curved elements, : simply supported, cantilever and overhanging beams for various loads, : effect of simple geometric forms in the overall structural behavior.

<u>Unit – III:</u>

Primary and secondary forces acting on the structures – gravitational force, live load, wind, temperature variation, distribution of loads through the elements of the structural system.

Unit – IV:

Primary and secondary forces acting on the structures – gravitational force, live load, wind, temperature variation, distribution of loads through the elements of the structural system.

Unit - V:

Characteristic requirements of structural design – stress and strains, strength, stiffness and stability. Discussion on factors affecting them and the ways of satisfying these requirements. Study of behavior of structures through models and testing them for given loads.

Unit – VI:

Structural properties of basic materials like masonry, timber, concrete and steel etc. Light weight space structure, small and large scale surface structure, integrated display system and structural elements.

Unit – VII:

Structural systems and their layout for a small building. Structural systems for elements of interior spaces – false ceilings etc. Structural system for urban interior spaces – malls, fair grounds, exhibition spaces, etc.

References

Rowland J. Mainstone: Development of Structural Form

Rangwala: Engineering Materials

S.P.Bindra, S.P.Arora, Building Construction B.C. Punmia: Strength of Materials vol - I

16IDP311		FURNITURE DESIGN SEMESTE												
Marks	Internal	40		Ext	ern	al	60	Total	Total 100			3		
Instruction Hou	ırs/Week	L	0	0 T 0 P/S			6			3				

- To help the student understand day lighting and technology of artificial lighting.
- To equip the student to understand and successfully apply lighting techniques with color effects.
- To understand the various types of furniture's from history to the current date.
- To produce designs that will suit the function, location and the ergonomics.
- To understand different types of lighting ad to use apt luminaries and fixture.
- To make different styles of furniture both in modular and in customized.

COURSE OUTCOME:

- 1. Awareness of the role of light and color in design with respect to macro scale of sustainability and ecology as well as in the micro scale of shaping of outdoor environments.
- 2. Knowledge about the elements of light and color
- 3. Sensitivity towards evolution of different color combination and realization of color in different lighting.
- 4. To have to ability to understand the furniture in plans sections and elevation and to have ergonomic detail compliance in every format
- 5. To be able to make electrical drawings with apt representation and accommodating different types of lighting details.

To introduce the idea of detailing in a micro concept of furniture design and to be able to produce products suitable for comfort, function and aesthetics

Unit – I

Furniture categories, exploration of the idea of furniture, role of furniture in interior design, Design approaches in furniture design.

Assignment: Measured drawing of a piece of furniture – plan, elevation and drawings on full scale

<u>Unit – II</u>

Brief overview of the evolution of furniture from Ancient to present: Various stylistic transformations. Furniture designers and movements. Analysis of furniture in terms of human values, social conditions, technology and design criteria.

Unit - III

Functional and formal issues in design: study and evaluation of popular dictums such as "Form follows function", Form and function are one", "God is in Details" etc.

Evaluation of visual design: study of Gestalt theory of design – law of enclosure, law of proximity, law of continuity etc.

Human factors, engineering and ergonomic considerations: principles of universal design and their application in furniture design.

Unit – IV

An introduction of various manufacturing processes most frequently adopted in furniture design such as Injection Molding, investment casting, sheet metal work, die casting, blow- molding, vacuum - forming etc.

Unit - V

Seating Design: Different types of seating with a focus on the following –

- Functionality
- Aesthetics
- Style
- Human factors and ergonomics

The other component to be considered is the cost of the designed furniture piece. Assignment: Design with wood, metal and combination of materials. Drawings, details and prototype making. Market survey of available products and economics of products.

Unit – VI

Storage systems: Functional analysis of storage systems and thereby deriving types of cabinets needed for interior spaces – kitchen cabinets, wardrobes closets, book cases, show cases, display systems etc.

Assignment: Exercise to design kitchen cabinets for a given kitchen.

Unit –VII

Modular approach to furniture design – various materials, combination of materials and its application – design parameters, ergonomics etc. Drawings and prototype. Survey of several modular systems available for different functions in the market. Exploration of wood, metal, glass, plastics, FRP as materials for system design. Cost criteria of furniture design.

Assignments: Typology of furniture with respect to the different states in India.

Design for middle and lower middle income groups- elements of living units, education institutes, health facilities, street elements etc.

References:

Joseph Aronson, The Encyclopedia of Furniture: Third Edition ,1961

Bradley Quinn, Mid-Century Modern: Interiors, Furniture, Design Details, Conran Octopus Interiors, 2006.

Jim Postell, Furniture Design, Wiley publishers, 2007.

Edward Lucie-Smith, Furniture: A Concise History (World of Art), Thames and Hudson, 1985

Robbie. G. Blakemore, History of Interior Design and Furniture: From Ancient Egypt to Nineteenth-Century Europe, Wiley publishers, 2005.

John.F. Pile, Interior Design, 2nd edition, illustrated, H.N.Abrams, 1995.

16IDP312	WO	WORKSHOP (WOOD, CANE & BAMBOO) SEMESTE											
Marks	Internal	60		Ext	ern	al	90	Total	150		Exam Hours	3	
Instruction Hou	ırs/Week	L	L 0 T 0 P/S				6		Cred	lits		3	

- To understand the basic methods of furniture making with focus on hands
- on methods regarding workshop practices in wood, metal, plastic, textiles etc.to understand the usage of various materials as required with its properties.
- To understand the usage of engineered wood against the solid wood.
- To understand the fixing details of multiple materials and its interaction with each other.
- To be introduced to alternate materials
- To relate the various capacities into creative pursuits of design.
- To understand and acquire knowledge in interior workshops for hands on experience in build and construct design processes.

COURSE OUTCOME:

- 1. Understanding the scale of drawing to life size
- 2. To use tools related to wood glass and alternative substitution to wood.
- 3. To understand properties and usage of materials henceforth.
- 4. To understand modular furniture through engineered wood.
- 5. To understand the various capacities of hardware for the various materials.
- 6. To understand wood joints and its usage in various circumstances.
- 7. To develop a keen eye for compositions through workshops.
- 8. To use all materials in coordination with other materials and create an understanding of multi material compositions.

Unit – I:

Types of wood –natural and artificial and its properties

Working with wood and wood products to understand material parameters. Wooden joinery and its strength. Wood polishes and other finishes – color and surface quality.

Unit – II:

Making of elements of various scales in the built form such as interior space making elements, furniture forms, various products, Art & Artifacts by using wood.

Unit – III:

Introduction to cane, bamboo, working with bamboo/cane and their products to understand material parameters. Bamboo and cane joinery and its strength. Polishes and other finishes

Unit – IV:

Understanding the material and tools by making objects which allow students to explore the forms, surfaces, textures and patterns. Explore different joinery, support conditions, and woven surfaces.

<u>References</u>

Carol Stangler, The crafts and art of Bamboo, Rev. updated edition, Lark books, 2009. Dr Angelika Taschen, Bamboo style: Exteriors, Interiors, Details, illustrated edition, 2006. Albert Jackson & David Day, The complete manual of wood working, knopf publishers, 1996. Lonnie Bird, Jeff Jewitt, Thomas lie- Nielsen, Taunton's Complete Illustrated Guide to Woodworking, Taunton, 2005.

Peter Korn, Wood working Basics: Mastering the essentials of craftsmanship, Taunton, 2003.

16IDS321		INTERIOR DESIGN IV SEMESTE												
Marks	Internal	160		Ext	tern	al	240	Total	400		Exam Hours	6		
Instruction Hou	ırs/Week	L	L 2 T 0 P/S				10		Cred	lits		7		

- To develop an understanding of various degrees of enclosures and various types of relationship between spaces.
- Understanding of the various effects that could be created by manipulating the enclosing elements such as walls, roof etc.
- To understand the design proximity and relation of spaces.
- To understand the basic concepts for the size of the project.
- To develop understanding of the scale, function and options existing when• designing small-scale spaces in residences such as toilets, kitchens, living, bedrooms etc.
- Development of ideas with regard to false ceiling, wall paneling, flooring,• floor coverings, curtains, windows, doors and other elements of residential interiors.

COURSE OUTCOME:

- 1. An understanding of the qualities of different elements as well as their composite fusions.
- 2. An ability to engage and combine the elements of design in spontaneous as well as intentional ways in order to create desired qualities and effects.
- 3. Development of required skills observation / analysis / abstractions / interpretation / representations / expressions through models and drawings.
- 4. To analyze the pre data of the concepts and to introduce design solutions using a creative approach.
- 5. To be able to describe an understanding that is both in representation and verbally present the same
- 6. To update and to introduce various other methodologies to enhance the skill set.
- 7. The students shall understand the basic functional aspect of designing simple building type and its relevant spatial organization.
- 8. The students shall be learn to reciprocate and sensitize the design/concept to the environment and the design skill of the project

The primary focus should be on –

Anthropometry

Design methodology

Conceptual exploration and representation.

Creativity

Scale/proportion

Documenting space

Graphic design (page layout and composition)

Concepts sketching

Application of design principles and elements

Portfolio development

The list of suggested topics to be covered as design problems:

Single room residence, Doctor's clinic, kindergarten school, Architect's studio, Small cafeteria, Bank extension counter, Departmental store, local police station, local post office, products used by architects in the studio, products for children in kindergarten etc.

Note: At least two major exercises and two minor design/time problems should be given.

In the end exam, which is a viva-voce the students have to present the entire semester work for assessment.

References

Karlen Mark, Space planning Basics, Van Nostrand Reinhold, New York, 1992.

Joseph D Chiara, Julius Panero, & Martin Zelnick, Time Saver standards for Interior Design & space planning, 2nd edition, Mc-Graw Hill professional, 2001.

Francis.D. Ching & Corky Bingelli, Interior Design Illustrared, 2nd edition, Wiley publishers, 2004. Julius Panero & Martin Zelnick, Human Dimension & Interior Space: A source book of Design Reference standards, Watson – Guptill, 1979.

Maureen Mitton, Interior Design Visual Presentation: A Guide to Graphics, Models, and Presentation Techniques. John Wiley and Sons, 2003

Mark.W. Lin, Drawing and Designing with Confidence: A step-by-step guide, Wiley and Sons, 1993. Robert Rengel, Shaping Interior Space, Fairchild Books & Visuals ,2002

16IDS322	ADVA	NCE.	D N	/IAT	ГЕН	RIAL	S AN	D APPLICA	TION	IS	SEMEST	ER-III		
Marks	Internal	80		External 120 Total 200 Exam Hours										
Instruction Hou	ırs/Week	L	1 T 0 P/S 6 Credits											

- Understanding the basic components of the buildings that envelope a small buildings
- Understanding the different types in each element and different treatments for the same.
- Understanding function of each component of a building like foundation, walls, beams, column, and roofs.
- Understanding simple roof & floor finishes.
- To understand the primary basics of the loading in a structure and the distribution of the load
- To understand the composition and properties of the materials.
- To understand the various components of interior space as doors, windows, staircases.

COURSE OUTCOME:

- 1. Students learn Interior construction details using naturally occurring building materials.
- 2. Student are taught to judge the structure before making any structural changes required in renovation.
- 3. Working format with for materials such as stone, bamboo, mud and lime through drawing as well as doing a literature or live case study.
- 4. Students are to submit drawing plates comprising of technical plan, elevation and section along with sketches and details showing method of construction.
- 5. Students will be honing the skills of technical drawings and their representations.
- 6. Students will be able to use this material knowledge during construction and can find best materials suited for apt activities.
- 7. To inculcate in students and understanding of ideas in 3d and physical models

Unit – I

Roofing and Flooring – Roofing tiles and asbestos cement products, sheets and fiber boards – properties, uses and application. Various natural as well as artificial flooring materials like vitrified tiles, ceramic tiles, Shahabad stones, Mosaic, Rubber, Linoleum, PVC and PVA flooring. Properties, other uses and applications in the interiors.

Unit -II

Metals – Steel, iron, aluminum, bronze, brass, copper – alloys, characteristics, form and uses, properties, definition of terms, methods of working with metals, fixing and joinery in metals, finishing and treatment to metals. Application of metals to built form and interiors - special doors and windows, ventilators – sliding, sliding and folding, revolving, pivoted, rolling, collapsible, dormer, skylights, clerestory etc.

Unit -III

Fabrics and other furnishing materials – fibers, textiles, fabric treatments, carpets, durries, tapestries, Drapery, upholstery, wall coverings, etc. –properties, uses and application in the interiors.

Unit – IV

Miscellaneous materials such as cork, leather, paper, Rexene etc. – their properties, uses and applications in the interiors. A brief overview of Green materials.

<u>References</u>

Bindra, S.P. and Arora, S.P. Building Construction: Planning Techniques and methods of Construction, 19th ed. Dhanpat Rai Pub., New Delhi, 2000.

Moxley, R. Mitchell"s Elementary Building Construction, Technical Press Ltd. Rangwala, S.C. Building Construction 22nd ed. Charota Pub. House Anand, 2004.

Sushil Kumar. T.B. of Building Construction 19th ed. Standard Pub. Delhi, 2003.

Chowdary, K.P. Engineering Materials used in India, 7th ed. Oxford and IBH, New Delhi, 1990.

Rangwala, S.C. Building Construction: Materials and types of Construction, 3rd ed. John Wiley and Sons, Inc., New York, 1963.

Francis D. Ching, Building Construction Illustrated, Wiley publishers, 2008. S.K.Duggal, Building Materials, Illustrated, A.A.Balkema,1998.

SEMESTER-4

16IDT401		ENV	/IR	ON	MI	ENTA	L CC	NTROL - I			SEMEST	ER-IV
Marks	Internal	40 External 60 Total 100 Exam Hours										
Instruction Hou	ırs/Week	L	L 3 T 0 P/S 0 Credits									

COURSE OBJECTIVE:

- To create the awareness about environmental problems among people.
- To develop an attitude of concern for the environment.
- To motivate public to participate in environment protection and improvement.
- To be introduced to a sustainable approach in the dwelling formats.
- To create an ardent respect for the depleting resources of the world.
- To understand the biodiversity and the impact of introducing building environments in the various bio diverse surroundings.

COURSE OUTCOME:

- 1. Master core concepts and methods from ecological and physical sciences and their application in environmental problem solving.
- 2. Master core concepts and methods from economic, political, and social analysis as they pertain to the design and evaluation of environmental policies and institutions.
- 3. Appreciate the ethical, cross-cultural, and historical context of environmental issues and the links between human and natural systems.
- 4. To apply sustainable approach that could be environmental friendly to reduce the carbon footprint.
- 5. To understand the changes in the ecosystems due to the intervention of the human race.
- 6. To understand and help in the global green revolution that is initiated to produce green environments for the future to come

Unit – I

Need to study acoustics, methods used for good acoustics. Basic theory: Generation, propagation, transmission, reception of sound: Frequency, wave length and velocity of sound, sound intensity, inverse square law, Decibel scale.

Unit –II

Human ear, Loudness perception, subjective effects, characteristics of sound in speech and music. Speech privacy and annoyance, background noise. Communication in open plans, electronic sound systems, loud speaker's layout.

Unit – III

Room acoustics: Behavior of sound in enclosed spaces. Ray-diagrams, sound paths, effect of geometry and shapes, sound absorption, sound absorption coefficients, Sabine's formula, reverberation and resonant panels.

Unit – IV

Acoustic Design process and different types of buildings – auditoriums, concert halls, cinema halls, seminar rooms, lecture halls, classroom and open offices.

Unit - V

Noise reduction, sound isolation, transmission loss. TL for walls, sound leaks in doors, noise reduction between rooms, construction details for noise reduction. Noise reduction and built form. Noise reduction from mechanical equipment. Rubber mounts, vibration isolation guidelines, characteristics of duct system, noise in AC ducts, vibration isolation of pumps and generators.

Unit- VI

Introduction – Lighting and vision, basic units, photometry and measurement. Effects of good lighting, considerations for good lighting, brightness, glare, contrast and diffusion. Economic issues of lighting.

Unit VII

Quality and quantity of different sources of light – daylight, incandescent, fluorescent, halogen, electric gas discharge high discharge, neon, cold cathode, mercury, sodium vapor etc. lighting levels, visual field. Survey of lamps available in the market with cost and technical specifications.

Unit VIII

Day light – advantages, admitting daylight, controlling daylight – multiple glazing, orientation, window treatments, potentials of day lighting as an energy resource.

Artificial lighting - color characteristics of artificial lighting, integration of day lighting with artificial lighting, lighting controls, intelligent building systems for lighting, switches, dimmers.

Unit IX

Planning lighting – general aims, lighting needs, calculation of lighting levels, intensity levels, energy and installation costs and other factors, selection of fixtures, location and placing of fixtures.

Unit X

Lamps and lighting fixtures – Floor, table and desk, wall mounted, ceiling units, built in lighting, miscellaneous types, decorative lighting, spot lighting, task lighting, underwater lighting etc.

Note: Detailed acoustic design and lighting should be done for any one type of building.

References

Poella . L. Leslie, Environmental Acoustics.

Moore J.E., Design of good acoustics, The architectural press, London, 1961.

Burris, Harold, Acoustics for Architect.

Lord, Peter and Tempelton, Duncan, The Architecture of sound,.; Designing places of Assembly, Architectural press ltd, London, 1986.

Egan David, Architectural acoustics, Mc-Graw Hill Book company, New york, 1988.

John.F. Pile, Interior Design, 2nd edition, illustrated, H.N.Abrams, 1995.

Wanda jankowski, Lighting: In Architecture and Interior Design, pbc intl, 1995.

Moore Fuller, Concepts and practice of Architectural Day lighting, Van Nostrand Reinhold co., New York, 1985.

David Egan. M. Concepts in Architectural lighting Mcgraw Hill Book company, New York, 1983.

16IDP411	ADV	ANC	ED	CO	MI	PUTE	RAP	PLICATIO	NS		SEMEST	ER-IV	
Marks	Internal	60	60 External 90 Total 150 Exam Hours										
Instruction Hou	ırs/Week	L	L 1 T 0 P/S 4 Credits										

- To make them digitally strong in the design related software.
- To make them understand and realize beautiful presentations.
- Understand #D nuances related to this subject.
- To represent ideas using technology and to be update in the use of softwares.
- To introduce to basic features of Artificial intelligence
- To Use software that are related to to BIM
- To help the student understand the technology of computer and its terminology.
- To enable the student to understand the applications of the software and graphic system.

COURSE OUTCOME:

- 1. Ability to express using digital tools in the realm of visual composition, drafting.
- 2. Ability to express using digital tools 3D visualization and rendering
- 3. To be able to represent ideas digitally for client understanding.
- 4. To understand the design in 3d to ensure the elimination of design flaws when translated from 2 d
- 5. To understand BIM and its overall structure.
- 6. To induce digital drawing reading and performing capacity.
- 7. Ability to express using digital tools in the realm of visual composition, drafting, 3D visualization and rendering

Unit – I

Starting AutoCAD: Introduction to the menu, starting drawings from scratch. Creating and using templates- starting drawings with setup wizards. Saving and closing a file.

Unit – II

Using co-ordinate systems – The UCS. Working with Cartesian and polar coordinate systems. Using displays with shortcuts.

<u>Unit – III</u>

Setting up the drawing environment – setting the paper size, setting units, grid limits, drawing limits, snap controls. Use of paper space and model space.

Unit – IV

Basic commands dealing with drawing properties: Layer control, change properties, line weight control, etc.

<u> Unit – V</u>

Inquiry methods: Using data base information for objects, calculating distance, angle, areas etc.

Unit – VI

Dimensioning commands and blocks: Dimensioning the objects in linear, angular fashions along with quick time dimensioning etc. Creating and working with blocks, creating symbols, use of blocks in creating a layout, of a residential area- one exercise to be done as lab assignment.

Unit – VII

Orientation towards 3D: 2D to 3D conversion, perspective view, walk through the layout.

$\underline{Unit - VIII}$

3D-Max: Understanding 3D, theory behind 3D modeling. Preparing for construction of 3D models. Construction of 3D surface models- extrusion, wire frame, creation of a shell, elaborate surfaces.

Unit -IX

Solid modeling: concepts behind solid modeling, composite solids creation and modification, solids display and inquiry.

Unit - X

Rendering and presentation. Printing and plotting.

References

Teyapoovan. T., Engineering Drawing with Auto CAD 2000. Vikas Pub House Pvt Ltd, New Delhi, 2000. Parker, Daniel and Rice, Habert. Inside Auto CAD Daniel, 1987.

Georgeomura, Auto CAD, Release 2000.

Oscar Riera Ojed , Lucast Guerre, Hyper realistic Computer Generated Architectural Renderings . Giuliano Zampi Conway Lloyd Morgan, Virtual Architecture.

16IDP412	L	IFES	TY	LE	AC	CES	SORI	ES DESIGN	Ī		SEMEST	ER-IV
Marks	Internal	60	50 External 90 Total 150 Exam Hours									
Instruction Hou	ırs/Week	L	L 1 T 0 P/S 4 Credits									

- To introduce students to all accessories that could be used in each and every space in design.
- To make students understand the need for aesthetics in design
- To use all above said materials in the most creative fashion that they could use.
- To help the student understand day lighting and technology of artificial lighting.
- To equip the student to understand and successfully apply lighting techniques with color effects.
- To be able to experiment new materials and to understand the properties of the materials.

COURSE OUTCOME:

- 1. Ability to decide the other factors of design which has no limitations and understand the importance of appropriate accessories to fill in the space as per design requirements.
- 2. Understanding the luxury element in interior design which leads to a picture perfect assimilation of items in design principles.
- 3. To understand the development and technology of the product and the procedure of manufacturing.
- 4. To be able to approach the design with the utmost importance to the function and the aesthetics to be incorporated.
- 5. To be able to physically make a product that faces all challenges laid for the execution and design of the same
- 6. To be able to assess the working of the project and to be able to redesign with the errors o be minimized as much as possible.

Unit _l

Insight of various products and lifestyle accessories in the interiors. Role of accessories in interiors. Integration of accessories in interior design. Design approaches in product and lifestyle accessories design with a focus on functionality, ergonomics, aesthetics, multiple usages etc.

Unit – II

Stylistic development of decorative accessories from the past to present with insight into technological advances and the influences of social, economic and political factors on their design. Brief study of period room settings with the context of decorative accessories complementing the architecture and interior design.

Unit – III

Study of materials and processes adopted in accessories design. Basic understanding of construction principles, anthropometrics, principles of sizes and proportions, modeling, rapid prototyping, color, texture etc. with broad orientation to socio-cultural and historical context of the sector. Orientation to Indian as well as global context of interiors, trends and market.

Unit – IV

Design approach with limited constraints inherent in accessory products. Evolving the strategy of design with integration of technical complexities and lifestyle influences. Development of the design of products and accessories to specific interiors and prevailing trends. Broad based approach towards

innovative design and application to multi products and multi materials in manufacturing interior products and lifestyle accessories.

$\underline{Unit-}V$

A detailed study involving all the design aspects of any of the following lifestyle accessories: luminaire design, glassware, lighting, textiles, mirrors, clocks, wall coverings etc.

References

Laura Slack, What is product Design? Roto Vision publishers, 2006

Treena Crochet and David Vleck, Designer"s Guide to Decorative Accessories, Prentice Hall, Ist edition, 2008.

Michael Ashby, Kara Johnson, Materials and Design: The Art and Science of material selection in product design, Butter Worth Heinemann, 1st edition, 2002.

International Design Yearbook, 1995: Furniture, Lighting, Tableware, Textiles and Products, Books Nippan, 1996.

Karl. T. Ulrich, Steven D. Eppinger, Product Design and Development, McGraw-Hill Education Singapore; 4th edition, 2007

William Lidwell, Kritina Holden, Jill Butler, Universal principles of Design, Rockport publishers, 2003.

16IDP413		E	STI	MA	IT	ON A	ND (COSTING			SEMEST	ER-IV	
Marks	Internal	40	40 External 60 Total 100 Exam Hours										
Instruction Hou	ırs/Week	L	L 0 T 0 P/S 6 Credits										

- To equip the students to prepare the Estimate in order to fore see the cost of the work
- To implement an interior design project & also to monitor / control project cost.
- To be able to make specification of the materials used and hence regulate the cost to keep it in the budget specified by the client.
- To understand various finishes and its rates to be executed as per the budget and the designers choice.
- To be able to provide a rough estimate and a detailed estimate as in need of the project.
- To be able to learn to control the cost and time with respect to the project.

COURSE OUTCOME:

- 1. Ability to understand and write specification for the construction projects
- 2. Ability to do estimate of building interiors with various quantities
- 3. To be update about the latest materials available in the market ad to be able to substitute materials to attain cost goals.
- 4. To understand the various methods of estimation that can be made and to be able to use the same during the execution of the project.
- 5. To have the knowledge of the budget limits of the client and hence will be able to make suitable suggestions to the client.
- **6.** To be able to alter the specification and to adjust the final cost though the changes

1. INTRODUCTION TO ESTIMATION

Types and purpose, approximate estimate, detail estimate of building, Bill of quantity format.

Quantity survey - Principle of measurement and billing, elementary billing and measurement of basic materials like brickwood, concrete, etc. Advance billing and measurement of structural and service item of work

2. COST ESTIMATING

Function of cost planner, liaisons with consultant construction planning technique for efficienjt cost control or cost budgeting of a project.

Exercise in variation, cost adjustment and cost analysis norms and standard for building project. Relationship between specification with B.O.Q. on grounds of cost economics.

3. COST BUDGETTING

The business environment and its structure in practice details and information on taxation, depreciation, operation cost, economics of building plant and material handling.

4. FINANCE AND BUDGETTING

Financial control and management for building construction and maintenance investment - role of various financial agencies for building and land development. Financing of projects, economic feasibility report, valuation depreciation and its implication, and assessment of completed project.

5. SPECIFICATION

Detailed Specifications for all Civil & Architectural works for a Typical two-storeyed Residential Building

References

- 1. Dutta, Estimating and Costing, S.Dutta and Co., Lucknow
- 2. S.C.Rangwala, Elements of Estimating and Costing, Charoter Publishing House, India.
- 3. W.H.King and D.M.R.Esson, Specification and Quantities for Civil Engineers, The English University Press Ltd.
- 4. T.N.Building Practice, Vol.1, Civil, Govt. Publication.
- 5. P.W.D. Standard specifications, Govt. Publication.

16IDP421			II	NTE	ERI	OR D	ESIC	GN IV			SEMEST	ER-IV	
Marks	Internal	160	50 External 240 Total 400 Exam Hours										
Instruction Hou	ırs/Week	L	2 T 0 P/S 10 Credits									7	

COURSE OUTCOME:

- 1. Ability to collect, assimilate and integrate knowledge in a holistic manner.
- 2. Sensitivity towards the nature and values of unselfconscious and collective design as well as the interconnectedness of human society and environment
- 3. Ability to observe and analyze changes in the above.
- 4. Development of required skills observation / analysis / abstractions / interpretation / representations / expressions through models and drawings.
- 5. To analyze the pre data of the concepts and to introduce design solutions using a creative approach.
- 6. To be able to describe an understanding that is both in representation and verbally present the same.
- 7. To update and to introduce various other methodologies to enhance the skill set.
- 8. The students shall understand the basic functional aspect of designing simple building type and its relevant spatial organization.
- 9. The students shall be learn to reciprocate and sensitize the design/concept to the environment and the design skill of the project

The primary focus should be on –

- space planning process (block diagram, concept statement)
- Furniture
- Historic style
- Structural integration
- Material selection
- Color
- Rendering
- Design Process/methodology
- Creativity /originality
- Documenting space (sketch and photo documentation)
- Anthropometry and ergonomics
- Graphic design (page layout and composition)
- Concepts sketching
- Application of design principles and elements
- Portfolio development

The list of suggested topics to be covered as design problems:

- Thematic space making with Art and craft forms of our own culture in India East, West, North, Central and so on.
- Design of living units of various geographical locations and culture by involving historical periods, styles and use of craft in its inherent quality and form craft and living environment.
- Applications of art / craft at public level spaces- lounge (hotel), restaurant of specific ethnic characteristics.
- Response to today"s situation of urban society For a given building create contemporary homes of modern society needs, realities, value system etc.

Note: At least two major exercises and two minor design/time problems should be given. In the end exam, which is a viva-voce the students have to present the entire semester work for assessment.

Reference Books:

Karlen Mark, Space planning Basics, Van Nostrand Reinhold, New York, 1992.

Joseph D Chiara, Julius Panero, & Martin Zelnick, Time Saver standards for Interior Design & space planning, 2nd edition, Mc-Graw Hill professional, 2001.

Francis.D. Ching & Corky Bingelli, Interior Design Illustrared, 2nd edition, Wiley publishers, 2004.

Julius Panero & Martin Zelnick, Human Dimension & Interior Space : A source book of Design Reference standards, Watson – Guptill, 1979.

Maureen Mitton, Interior Design Visual Presentation: A Guide to Graphics, Models, and Presentation Techniques. John Wiley and Sons, 2003

Mark.W. Lin, Drawing and Designing with Confidence: A step-by-step guide, Wiley and Sons, 1993.

Robert Rengel, Shaping Interior Space, Fairchild Books & Visuals ,2002

Neufert Ernest, Architect"s Data, Granada pub. Ltd. London, 2000.

John F. Pile, A history of interior design, Laurence King Publishing, 2005.

Robin D. Jones, Interiors of Empire: Objects, Space and Identity within the Indian Subcontinent, Manchester University Press; illustrated edition, 2008

16IDP422	IN	ITEG	GRA	\TE	D I	PROJ	ECT	WORK - I			SEMEST	ER-IV
Marks	Internal	60	External 90 Total 150 Exam Hours									
Instruction Hou	ırs/Week	L	0 T 0 P/S 6 Credits									3

COURSE OBJECTIVE:

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- The student has to exhibit the capacities of an interior design in full ideology and should be ready for the professional challenges in future.
- The project understanding in totality will be expected from each student.
- It will help understand the importance of each subject in the previous years and its applications

henceforth

- To understand the environmental impact assessment and to analyze the feasibility of the project in any given site.
- To check the feasibility of the project in the services.

COURSE OUTCOME:

- 1. Ability to integrate all the knowledge acquired so far and to exhibit the same through drawings and renderings.
- 2. Ability to integrate all aspects of the project to give a final report.
- 3. To be ready for large scale projects before the thesis.
- 4. To conduct research and to present the research with analysis of the feasibility of the project.
- 5. To understand the socio economic implication of the project in the given location.
- 6. To check the technical feasibility of eth project with parameters such as soil, water and other natural elements.
- 7. To assess the building for seismic zone and hence design according to the reading and understanding.

The student has to submit a project feasibility report on the project done in the design studio by integrating the knowledge and skills acquired from all the subjects studied till date. The report may consist of the following –

- Environmental impact assessment of the project following the standards and specifications
- Socio-economic appraisal of the project and the design considering factors such as behavioral aspects, security considerations, costs for different user groups, aesthetic preferences etc.
- Technical feasibility through execution and detailing of different spaces and elements of design, checking the feasibility of layout for service systems and specifications
- Costing of the project bill of quantities, schedule of rates, specifications etc. economic viability and financial viability
- Space planning aspects/ issues user activity spaces, access to physically challenged, fire safety, other services, green rating etc.

Note: The report has to presented for internal assessment

References

M.P. Birkett, An appraisal of project work as an educational tool within interior design education at tertiary level and its relation to professional practice, Royal College of Art, 1985.

Griff Boyle, Design Project Management, Ashgate Publishing; illustrated edition, 2003.

16IDES431A	E	LEC'	ΓIV	Æ –	- I	WOI	RKSH	IOP (META	L)		SEMEST	ER-IV	
Marks	Internal	60	Exam Exam Hours										
Instruction Hou	ırs/Week	L	L 1 T 0 P/S 4 Credits										

- To understand the basic methods of furniture making with focus on hands
- on methods regarding workshop practices in wood, metal, plastic, textiles etc.to understand the usage
 of various materials as required with its properties.
- To understand the usage of engineered wood against the solid wood.
- To understand the fixing details of multiple materials and its interaction with each other.
- To be introduced to alternate materials
- To relate the various capacities into creative pursuits of design. To understand the basic methods of furniture making with focus on hands on methods regarding workshop practices in metal
- To understand the joineries and also understand the properties in these materials. This will help them add new elements into their design which could be their own personal ideas.

COURSE OUTCOME:

- 1. Ability to understand and construct furniture to live size
- 2. understanding the scale of drawing to life size
- 3. To use tools related to wood glass and alternative substitution to wood.
- 4. To understand properties and usage of materials henceforth.
- 5. To understand modular furniture through engineered wood.
- 6. To understand the various capacities of hardware for the various materials.
- 7. To understand wood joints and its usage in various circumstances.
- 8. Ability to understand and construct furniture to live size understanding the scale of drawing to life size
- 9. To use tools related to metal and alternative substitution to metal and combination of wood, glass and metal

Unit –I TO 5

Types of metals, properties of metals, definitions of terms with reference to properties and uses of metals, various methods of working with metals, fixing and joinery in metals, finishing and treatment of metals., finishes on metals. Standard specifications.

Metals in built form activity – horizontal, vertical and inclined surfaces – in interior environment elements- products and furniture forms- doors, windows, jalies, railing, stair etc. Metals and other materials – form and joinery.

Note: Learning should be by feel and working with metals to explore design.

References

John .F. Pile, Interior Design, Harry. N Abrams, Inc. New York . 1995. Ron Fournier, Metal Fabricator"s Handbook, Rev. Illustrated edition, HP Books, 1990. Stanford Hohauser, Architectural and Interior models, Van Nostrand Reinhold, 1970.

16IDES431B	ELECTIVE – I WORKSHOP (WEAVING)	SEMESTER-IV
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Marks	Internal	60		Ext	ern	al	90	Total	150	Exam Hours	6
Instruction Hou	ırs/Week	L	1	T	0	P/S	4		Cred	lits	3

- To understand the basic methods of furniture making with focus on hands
- on methods regarding workshop practices in wood, metal, plastic, textiles etc.to understand the usage of various materials as required with its properties.
- To understand the usage of engineered wood against the solid wood.
- To understand the fixing details of multiple materials and its interaction with each other.
- To be introduced to alternate materials
- To relate the various capacities into creative pursuits of design. To understand the basic methods of furniture making with focus on hands on methods regarding workshop practices in metal
- To understand the joineries and also understand the properties in these materials. This will help them add new elements into their design which could be their own personal ideas.

COURSE OUTCOME:

- 10. Ability to understand and construct furniture to live size
- 11. understanding the scale of drawing to life size
- 12. To use tools related to wood glass and alternative substitution to wood.
- 13. To understand properties and usage of materials henceforth.
- 14. To understand modular furniture through engineered wood.
- 15. To understand the various capacities of hardware for the various materials.
- 16. To understand wood joints and its usage in various circumstances.
- 17. Ability to understand and construct furniture to live size understanding the scale of drawing to life size
- 18. To use tools related to metal and alternative substitution to metal and combination of wood, glass and metal.

Unit -I To 5

Introduction to fibers and yarns, table loom and floor loom, preparing warp, setting up loom for weaving. Basic weaves and their variations.

Variation weaves and design quality, weaves as light controlling device, weaves and its quality for upholstery, curtains and floor coverings.

Rugs and durries – motifs design, patterns and color variations.

Note: Extensive market survey of available fabrics for interior spaces – product specifications and manufacturers

<u>References</u>

Liz Gibson, Weaving Made Easy: 17 Projects Using a Simple Loom (Paperback), Interweave press, 2008 Deoborah Chandler, Learning to weave, Revised edition, Interweave press, 2009. Kirsten Glasbrook, Tapestry Weaving, Search Press, 2002.

SEMESTER-5

16IDT501	ENVIRONMENTAL CONTROL - II	SEMESTER-V
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Marks	Internal	40		Ext	ern	al	60	Total	100	Exam Hours	3
Instruction Hou	ırs/Week	L	3	T	0	P/S	0		Cred	lits	3

- To create the awareness about environmental problems among people.
- To develop an attitude of concern for the environment.
- To motivate public to participate in environment protection and improvement.
- To be introduced to a sustainable approach in the dwelling formats.
- To create an ardent respect for the depleting resources of the world.
- To understand the biodiversity and the impact of introducing building environments in the various bio diverse surroundings.

COURSE OUTCOME:

- 1. Master core concepts and methods from ecological and physical sciences and their application in environmental problem solving.
- 2. Master core concepts and methods from economic, political, and social analysis as they pertain to the design and evaluation of environmental policies and institutions.
- 3. Appreciate the ethical, cross-cultural, and historical context of environmental issues and the links between human and natural systems.
- 4. To apply sustainable approach that could be environmental friendly to reduce the carbon footprint.
- 5. To understand the changes in the ecosystems due to the intervention of the human race.
- 6. To understand and help in the global green revolution that is initiated to produce green environments for the future to come

Unit – I

Introduction – Climate and built form interaction. Global climatic factors, elements of climate, impact and issues of climatic balance in traditional and contemporary built environments, issues of ecological balance, implications of climatic forces in nature of spaces and forms. Patterns of organization and elements of built form at individual building.

Unit – II

Thermal comfort and heat flow: Thermal comfort factors, physiological aspects. Body heat balance. Building climatological site analysis, application of comfort diagrams.

Unit-III

Introduction to basic thermal units, theory of heat flow, heat transmission, thermal properties of materials, human heat balance. Physiological comfort, outdoors and indoors, heat flow within buildings, steady state conditions and periodic flow, thermal performance of building elements.

Unit -IV

Sun and Design process – Solar charts, sun angles and shadow angles, orientation for sun, sun control, design of shading devices, radiation, glare.

Unit-V

Solar energy and its technical applications. Climate and material choices, color and texture choices for interior spaces.

<u>References</u>

Koeinsberger, O.H. and others, Manual of Tropical Housing and Building. Orient Longman, Chennai, 2003. Konya Allan, Design for Hot Climates.

Kukreja. C.P. Tropical Architecture. Tata McGraw Hill Pub. Co. Ltd. New Delhi, 1978.

Markus, T.A and Morris. E.N. Buildings. Climate and Energy, Pitman Pub Ltd., London, 1980.

Olgay and Olgay, Solar Control and Shading Devices.

16IDT502]	PRO	OJE	CT	MA	NAG]	EMENT			SEMEST	ER-V
Marks	Internal	40		Ext	ern	al	60	Total	100		Exam Hours	3
Instruction Hou	ırs/Week	L	3 T 0 P/S 0 Credits								3	

- To introduce different management techniques suitable for planning and construction projects.
- To enable understanding of management systems for accomplishing the task efficiently in terms of quality, time and cost.
- To understand the elements of network and be able to take the project completion analysis.
- To understand various methods for the analysis and hence arrive at the management procedures.
- To handle and calculate risk in delays and hence suggesting corrections to beat time lag in projects.
- To update project in the process and be able to control manpower management.

COURSE OUTCOME:

- 1. Ability to understand a project from concept to commissioning, feasibility study & facility programme, design, construction to commissioning.
- 2. Ability to apply project management techniques in achieving objectives of a project like client needs, quality, time & cost.
- 3. An understanding of principles of management, construction scheduling, scope definition and team roles
- 4. To differentiate the management into time, labor, ad materials mainly apart from other contingencies.
- 5. To allocate various job works to different vendors and vendor management
- 6. To enable the smooth functioning of the project and to move towards completion in time.

1. INTRODUCTION TO PROJECT MANAGEMENT

Introduction to project Management concepts - background of management, purpose, goal and objectives, characteristics of projects and different aspects of management.

Traditional management system, Gantt's approach load chart, progress chart, bar chart merits and limitation. Schedule time, estimates units

2. PROJECT PROGRAMMING

Project programming, resources balancing, phasing of activities, programs, scheduling, project control, reviewing, updating and monitoring. Exposure to relevant software such as MS Project, Primavera, Introduction to modern management, concepts, uni-dimensional management techniques - Introduction to PERT and CPM introduction to network concepts, network elements and inter-relationships.

3. NETWORK TECHNIQUES

Network techniques, network logic - interrelationships, activity information, data sheets, development of network. CPM for management, CPM network analysis, identification of critical path float computation result sheets.

4. PERT NETWORK

PERT Network, introduction to the theory of probability and statistics, probabilistic time estimation for the activities of PERT network

5. PROJECT COST

Introduction to two dimensional network analysis, activity cost information. Cost time relationship, crashed estimates for the activities, compression potential, cost slope, utility, data sheet, project direct cost and indirect cost. Crashed programmes, network compression least cost solution least time solution, optimum time solution. Network techniques, PERT/CPM, generating alternative strategies using computers

References

- 1. Project management for design professionals By William Ramroth
- 2. Jerome D. Wiest and Ferdinand K. Levy, A Management Guide to PERT/CPM, Prentice Hall of Indian Pub.Ltd. New Delhi, 1982.

16IDS521			Ι	NTI	ERI	OR I	DESIG	GN V			SEMEST	ER-V
Marks	Internal	160		Ext	ern	al	240	Total	400		Exam Hours	6
Instruction Hou	ırs/Week	L	2	2 T 0 P/S 10 Credits							7	

- To create understanding of human built environment as a holistic, living entity from macro to micro scales
- shaped by geographic and socio-cultural forces as well as by historic, political and economic factors, through study of and design within the context of rural settlements.
- To enable a comprehensive study of rural settlement and Interior design in order to understand them as exemplar of collective design that evolved through various parameters.
- To observe changes in the above, analyze their nature and causes for them

COURSE OUTCOME:

- 1. Ability to collect, assimilate and integrate knowledge in a holistic manner.
- 2. Sensitivity towards the nature and values of unselfconscious and collective design aswellas the interconnectedness of human society and environment
- 3. Ability to observe and analyze changes in the above.
- 4. Ability to project future transformations and give possible/ appropriate ways to address issues, if any
- 5. Ability to collect, assimilate and integrate knowledge in a holistic manner.
- 6. Sensitivity towards the nature and values of unselfconscious and collective design as well as the interconnectedness of human society and environment
- 7. Ability to observe and analyze changes in the above.
- 8. Development of required skills observation / analysis / abstractions / interpretation / representations / expressions through models and drawings.
- 9. To analyze the pre data of the concepts and to introduce design solutions using a creative approach.
- 10. To be able to describe an understanding that is both in representation and verbally present the same
- 11. To update and to introduce various other methodologies to enhance the skill set.
- 12. The students shall understand the basic functional aspect of designing simple building type and its relevant spatial organization.
- 13. The students shall be learn to reciprocate and sensitize the design/concept to the environment and the design skill of the project

The primary focus should be on –

- Introduction to building codes
- Way finding, Signage and graphics
- Universal Design
- Accessible design
- Design Disabled
- Materials, furniture and finish selections
- Introduction to construction detailing

- Ergonomics and Human Factors
- Digital representation (3 D modeling)
- Space planning process
- Color
- Interior environmental control issues
- Rendering

The list of suggested topics to be covered as design problems:

- Institutional spaces in urban, semi-urban and rural contexts with an aim to explore and understand transformation and adaptive re-use.
- Historic and abandoned sites provide scope for rejuvenation through multi dimensional programs covering functions like museums, cultural and resource centers, libraries, convention centers, exhibitions etc. that also aim in making a social contribution.
- Recreational spaces such as auditoriums, halls, cinema houses, stage design etc. Knowledge
 of audio visual communication, color and light interaction, sound control system, design of
 interior elements, products and furniture forms.

Design issues in addition to the primary focus for the above are statement of institution character through interior environment responses to site and context, integration of interior architectural elements to other interior elements, dialogue between the existing and the newly added insert, interpretation of institutional activities and their spatial correlation.

Note: At least two major exercises and two minor design/time problems should be given. In the end exam, which is a viva-voce the students have to present the entire semester work for assessment.

References

Karlen Mark, Space planning Basics, Van Nostrand Reinhold, New York, 1992.

Joseph D Chiara, Julius Panero, & Martin Zelnick, Time Saver standards for Interior Design & space planning, 2nd edition, Mc-Graw Hill professional, 2001.

Francis.D. Ching & Corky Bingelli, Interior Design Illustrared, 2nd edition, Wiley publishers, 2004.

Julius Panero & Martin Zelnick, Human Dimension & Interior Space : A source book of Design Reference standards, Watson – Guptill, 1979.

Maureen Mitton, Interior Design Visual Presentation: A Guide to Graphics, Models, and Presentation Techniques. John Wiley and Sons, 2003

Mark.W. Lin, Drawing and Designing with Confidence: A step-by-step guide, Wiley and Sons, 1993.

Robert Rengel, Shaping Interior Space, Fairchild Books & Visuals, 2002

Neufert Ernest, Architect"s Data, Granada pub. Ltd. London, 2000.

Maryrose McGowan & Kelsey Kruse, Interior Graphic Standards, Wiley and sons, 2004.

Robert F. Erlandson, Universal and Accessible Design for Products, Services, and Processes, CRC; 1st edition, 2007.

Oliver Herwig & L. Bruce, Universal Design: Solutions for Barrier-free, Birkhäuser Basel; 1st edition, 2008

16IDS522]	NTE	GF	RAT	ΈD	PRC	JEC'	T WORK - I	I		SEMEST	ER-V
Marks	Internal	60		Ext	ern	al	90	Total	150		Exam Hours	6
Instruction Hou	ırs/Week	L	L 0 T 0 P/S						Cred	lits		3

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- The student has to exhibit the capacities of an interior design in full ideology and should be ready for the professional challenges in future.
- The project understanding in totality will be expected from each student.
- It will help understand the importance of each subject in the previous years and its applications henceforth
- To understand the environmental impact assessment and to analyze the feasibility of the project in any given site.
- To check the feasibility of the project in the services.

COURSE OUTCOME:

- 1. Ability to integrate all the knowledge acquired so far and to exhibit the same through drawings and renderings.
- 2. Ability to integrate all aspects of the project to give a final report.
- 3. To be ready for large scale projects before the thesis.
- 4. To conduct research and to present the research with analysis of the feasibility of the project.
- 5. To understand the socio economic implication of the project in the given location.
- 6. To check the technical feasibility of eth project with parameters such as soil, water and other natural elements.

To assess the building for seismic zone and hence design according to the reading and understanding. The student has to submit a project feasibility report on the project done in the design studio by integrating the knowledge and skills acquired from all the subjects studied till date.

The report may consist of the following –

- Environmental impact assessment of the project following the standards and specifications
- Socio-economic appraisal of the project and the design considering factors such as behavioral aspects, security considerations, costs for different user groups, aesthetic preferences etc.
- Technical feasibility through execution and detailing of different spaces and elements of design, checking the feasibility of layout for service systems and specifications
- Costing of the project bill of quantities, schedule of rates, specifications etc. economic viability and financial viability
- Space planning aspects/ issues user activity spaces, access to physically challenged, fire safety, other services, green rating etc.

Note: The report has to be presented for internal assessment

References

M.P. Birkett, An appraisal of project work as an educational tool within interior design education at tertiary level and its relation to professional practice, Royal College of Art, 1985.

Griff Boyle, Design Project Management, Ashgate Publishing; illustrated edition, 2003.

16IDS523	W	ORK	ΊN	GI)RA	WIN	IGS A	ND DETAI	LS	SEMEST	ER-V
Marks	Internal	80		Ext	tern	al	120	Total	200	Exam Hours	6
Instruction Hou	ırs/Week	L	1	T	0	P/S	6		4		

- Reading of working drawing, their co-relation and cross-referencing in various technical projections.
- To produce detailed measured drawings in plans, elevations, sections, detailing etc.
- To understand the various parameters involved in the detail drawing and to be able to produce the same.
- To incorporate all service drawings with respect to fire and safety, water supply and plumbing, electrical, acoustics and any such that will be accounted for.
- To be able to detail out each part into sub parts and to be able to provide construction execution details of the same.
- To be able to produce circulation patterns in the plan and to able to detail out the standards that are used in the design.

COURSE OUTCOME:

- 1. An understanding of all the aspects that go into the making of interiors through study of drawings related to construction.
- 2. Ability to resolve spatial concerns with technical aspects of a the interiors
- 3. Ability to design and detail components within a building interiors.
- 4. Ability to understand the structural components of the buildings and to be able to make changes only if necessary and hence impact studies to be carried out.
- 5. To understand designs in all parameters such as plans sections elevations and detailed drawings.
- 6. Joinery details to be detailed and produced as fit for construction.

Unit – I

Preparation of working drawings – Suitable scales of drawings, methods of giving dimensions and standards on plans, sections, elevations, details etc.

Unit – II

Preparation of plans – Architectural plans, furniture layout floor plans with clearances, different level floor plans, detailed floor plans of each room.

Unit – III

Elevations and Sections – Detailed sectional elevations of all the walls in the interior with all the required dimensions and specifications.

Unit - IV

Details of all services – layouts for flooring, ceiling, electrical, plumbing, lighting, fire fighting etc., toilet details, kitchen details, staircase details, furniture details, Interior finishing details, material, color and texture details,

Fixture and fixing and joinery details.

Unit - V

Specifications writing: Writing detailed clause by clause specifications for materials pre and post execution, tests, mode of measurements, manufacturers details and specifications etc.

Unit – VI

Manufacturer's specifications – Database of manufacturers specifications for the following materials based on surveys –

Glass, plywood and laminates, hardware, electrical, wiring, accessories, plumbing fitting and fixtures, flooring, cladding etc.,

Note: Students shall prepare at least two working drawing sets, one for a small residence and one for a large building.

References

Leibing. W. Ralph, Architectural Working Drawings, 4th edition, John wiley and sons, New York, 1999.

Macey. W. Frank, Specification in detail, 5th edition, Technical press ltd, London, 1955.

Shah, M.G.; and others, Building Drawing: An integrated approach to build environment, 3rd ed, Tata McGraw Hill Pub. Co. Ltd, New Delhi, 1996.

Fredd Stitt, Working Drawing Manual, McGraw-Hill Professional; 1st edition, 1998.

Kilmer, Workind Drawings and Details for Interiors, John Wiley and Sons

16IDS524			I	NTI	ER	IOR S	SERV	ICES			SEMEST	ER-V	
Marks	Internal	60		Ext	tern	al	90	Total	150		Exam Hours	6	
Instruction Hou	ırs/Week	L	1	T	0	P/S	4	4 Credits					

- To understand the need and application so fair conditioning, acoustics, electrification and mechanical services in buildings with exposure to various systems, methods and fixtures.
- To understand human comfort and to be able to produce environments for human comfort.
- To be able to understand various seasons and climatic zones in the world.
- To be able to produce sustainable interiors to ensure the conservation of natural resources.
- To be able to use natural sources of energy in design and to produce the effects desired both climatically and aesthetically.
- To understand the solar energy and its various uses.

COURSE OUTCOME:

- 1. An understanding of heat balance in human beings.
- 2. An understanding of the effect of sun and wind in the inside of buildings.
- 3. An understanding of material effects inside the buildings.
- 4. Ability to design buildings with interiors with respect to climate.
- 5. To be able to modify small building elements to improve the condition of a particular climate.
- 6. To appreciate various methods suited for natural heating and cooling in building systems

Unit - I

General idea of sources of water supply. Standards for quality of water. Domestic water systems, suction and storage tanks and their capacity. Pipes and their sizes and jointing. Consumption of water. Down take supply to various fittings. Types of fittings like taps, ball valves, hot water supply systems, bathtubs, showers, jets, cocks, valves etc. Faucets for kitchens, bathrooms and toilets. Check valves, foot valves, sump pump check valves etc.

Unit - II

Basic principles of sanitations and disposal of waste materials from buildings. Connection to outdoor drainage system, size requirements calculations, types of pipes available in the market. Water carriage systems, standard sanitary fittings, traps, pipes and their jointing. Flushing systems. Bathroom interior layouts, extensive market survey of products available, economies of products available, fixing of the products with other finishing materials.

Unit – III

Refuse, different forms of refuse garbage, house refuse – its collection, storage and transport, refuse chutes etc.

Unit – IV

Building wiring system. Service wires, metering distribution boards, circuits, MCB cutouts. Conductors, wiring methods, switch boards, electrical devices in the buildings, light and power circuits. Indian electricity rules, relevant provisions of NBC. Preparation of electrical layout scheme for a interior using standard electrical symbols.

Unit - V

Air conditioning, Mechanical ventilation – mechanical inlet and extraction systems. Functions of air conditioning. Principles of AC, capacity of AC, calculation of AC loads. Types of AC systems –

window AC, split, ductable, central AC and their details. Air distribution systems – ducts, air inlets. Noise control of AC.

Unit - VI

Fire – causes and spread of fire. Design considerations for fire safety, Devices for firefighting – portable, built in wet riser system, sprinkler system, fire hydrant. Class of fire and occupancy, study of fire regulations as per NBC. Services for multi storied buildings – lifts, escalators etc. – definition, location and arrangement.

Unit – VII

Vertical transportation systems – Introduction – lifts, escalators, definition, location, arrangement, structure, drives, traffic analysis, supervisory control, remote monitoring.

Unit – VIII

Security and safety systems – introduction, designing a security system – burglar alarm, CCTV, central alarm systems, intrusion sensors and space sensors. Other services – cable TV, PABX, computer labs – access flooring, server rooms.

Unit - IX

Intelligent buildings – introduction, definition, cost analysis, building environment, architecture and people, Information technology, communications & artificial intelligence in intelligent buildings. Design in computer age, engineering intelligence through nature.

Unit - X

Building automation and energy management – Introduction, History of development of BAS, typical BAS, criteria for choosing the right BAS, open system architecture.

References

Hussain S.K, T.B of water supply and sanitary engineering, 3rd ed, Oxford and IBH pub. Ltd., New Delhi, 1994

Kshirsagar, S. R, Water supply engineering, 6th ed, Roorkee publications, 1980.

Rangwala, S.C. water supply and Sanitary Engineering: Environmental Engineering, 19th ed, Charotar pub house, Anand, 2004.

Electrical wiring and contracting (vol. 1 to vol.4), London. The New era Publishing Company.

Dr Frith Abnwos and others, Electrical Engineering hand book.

William . J. Guinness, Mechanical and Electrical Systems for Buildings, New York : Mc Graw Hill.

Faber, Oscar and Kell, J.R. Heating and Air conditioning of Building. Architectural Press, surrey, 1945.

Prasad Manohar, Refrigeration and air-conditioning. 5th ed, New Age Intl. pub, New Delhi, 1996.

Derek Clements-Croome, Derek J. Croome, Intelligent buildings: Design, Management and Operation, Thomas Telford Books, London, 2004.

Albert Ting-pat So, Wai Lok Chan, Intelligent Building Systems, Kluwer Academic Publishers, 1999.

16IDES531A	ELE	CTIV	VE .	–II	S	IGNA	GE A	AND GRAP	HICS		SEMEST	ER-V	
Marks	Internal	40		Ext	ern	al	60	Total 100			Exam Hours	6	
Instruction Hou	ırs/Week	L	0	T	0	P/S	Credits						

- Knowledge about the various styles of signage manufactured in various materials is vital to an designer.
- Understanding the methods and techniques involved in signage and graphics.
- Understanding the signage location and using apt design and material is important.
- To understand the visibility factor and the importance of the signage.
- To be able to differentiate the various types of signage and to se it aptly in strategic locations.
- As a designer it is important to come up with unique and legible ideas for signage.

COURSE OUTCOME:

- 1. Ability to design products in signage using graphics.
- 2. Ability to understand the needs of the industry and give better products in design
- 3. Ability to experiment with different materials
- 4. Ability to provide proper lighting for the signage to be legible.
- 5. Ability to produce signage for large spaces and to be unique in design
- **6.** To be able to understand the hardware system and to be integrated to the project in total

Unit – I

Introduction – environmental graphic Design, wayfinding, Need, importance etc.

Unit – II

Information content system – kinds of sign information, hierarchy of content, developing the sign information content, Navigation – message hierarchy and proximity, Other factors affecting sign information content, pictorial information content, signage master plans.

Unit – III

The Graphic system - Typography overview, choosing a typeface, typographic treatment, typographic considerations in signage for nonsighted and low sighted people, symbols and arrows, other graphic elements, color, layout, overview of signage graphic process.

Unit – IV

The hardware system – shape, connotations of form, sign mounting considerations, sign size considerations, sign lighting overview, sign materials overview, basic sign materials, electronic message displays, stock sign hardware systems, sign materials and codes, overview of coatings and finishes applied to signs.

Unit – V

Signage Design – Eyelevel, light, Fonts, typographical systems and type area, pictograms, arrows, color – contrast, language, systems, tones, Coding, privacy and protection, Room identification.

Unit – VI

Signage Planning – contract, obtaining information, preliminary design, design, construction, work plan and prototypes, tenders, specifications, on-site management, completion.

References

Joseph DeChiara, Julius Panero, and Martin Zelnik Time-Saver Standards for Interior Design and Space Planning, 2nd edition, Mc-Graw Hill Professional, 2001.

Andreas Uebele, Signage Systems and Information Graphics, Thames and Hudson, 2007

Craig Berger, Wayfinding: Designing and Implementing Graphic Navigational Systems, Rotovision, 2009.

Chris Calori, Signage and Wayfinding Design: A Complete Guide to Creating Environmental Graphic Design Systems, Wiley and sons, 2007.

David Gibson, The Wayfinding Handbook: Information Design for Public Places, Princeton Architectural Press; 1st edition, 2009.

Rayan Abdullah and Roger Hubner, Pictograms, Icons and Signs, Thames and Hudson, illustrated edition, 2006

16IDES531B]	ELE(CTI	VE	-IJ	PF	RODU	CT DESIG	N		SEMEST	ER-V
Marks	Internal	40		External 60 Total 100 Exam								6
Instruction Hou	ırs/Week	L	0 T 0 P/S 4 Credits								2	

- Knowledge about the various styles of furniture manufactured in various materials is vital to a Designer.
- Understanding the methods and techniques involved in furniture and product design.
- To understand the importance of a digital product and then to create a digital product.
- The process involved in the design of a product to be understaood.
- To undertand the detilaing of the furniture and its feasibility for production
- To understand mass production techniques and the production line formation of the same.

COURSE OUTCOME:

- 1. Ability to design products
- 2. Ability to understand the needs of the industry and give better product design.
- 3. To understand the need and to be able to justify the product to be designed.
- 4. To follow design procedure and to understand the process to make a product.
- 5. To understand various materials and to execute the best possible material for a particular design.
- 6. To create a digital product and to be able to display the product details of the same

1. INTRODUCTION

An brief introduction to Product Designing – Various elements – History of Product Design – Definition of Product Design, understanding of Product Design - Purpose of Product Design – Role of Product Designers.

2. HUMAN FACTORS

Definition of human factors, Application of human factors data. Human activities, their nature and effects. Man-machine system and physical environment. Human performance and system reliability.

Information input and processing. Human control systems. Applied anthropometry – Human response to climate

3. ASPECTS OF PRODUCT DESIGN

Visual, Auditory, Tactual, Olfactory human mechanisms, Physical space and arrangement. Visual display, process of seeing, visual discrimination, quantitative and qualitative visual display, Alphanumeric and related displays, Visual codes and symbols.

4. PRODUCT DESIGN

Form, Colour, Symbols, User specific criteria, Material, Technology and recyclability, Packaging. Multiple Utility oriented approach to Product Design.

5. DESIGN EXERCISES

Design of Household elements, tools and devices – Spoon/Cutlery.

Design of furniture – Chairs/Computer table, Kitchen racks, Cabinets etc.

Design of Industrial Product – Watch Dial, Gear Wheels, Automobile Headlights etc.

Element design for the physically and mentally different people.

References:

- 1. Time Saver Standards for Interior Design
- 2. Andrew Alpern, Handbook of Speciality Elements in Architecture, McGrawhill Co., USA, 1982.
- 3. Francis D.K.Ching, Interior Design Illustrated, VNR Publications, New York, 1987.
- 4. An invitation to Design, Helen Marie Evans.

16IDES531C		\mathbf{E}	LE	ELECTIVE –II SET DESIGN SEMESTER											
Marks	Internal	40		Ext	ern	al	60	Total	100	Exam Hours	6				
Instruction Hou	ırs/Week	L	0 T 0 P/S 4 Credits							dits	2				

- Knowledge about the various styles of sets manufactured in various materials is vital to an designer for a foray into the film industry.
- Understanding the methods and techniques involved in set designs.
- To understand the defiance of temporary structures.
- To acquire knowledge of materials and construction techniques used in temporary structures.
- To understand the area and field specific for the film industry.
- To be able to design and imagine various backgrounds for the set design

COURSE OUTCOME:

- 1. Ability to design products and sets suitable to situations in concern
- 2. Ability to understand the needs of the industry and give better product in design
- 3. The student will be able to enter into the film industry in the foray of Design
- 4. The student will acquire knowledge various temporary structural methods.
- 5. To understand to set up stage and platforms for future
- 6. To understand history and security in the film industry and to be able to use the techniques already introduced
- 7. To understand theater sit up and the rolling screen design.

UNIT-1 FILM AND SOCIETY

Examination of the twentieth-century culture and society through film. Critical analysis of cultural and social conflicts are portrayed and worked out in popular films, and examination of how motion pictures create a window into modern society. Film as cultural texts to better understand history and culture manifestations.

UNIT-2 HISTORY AND THEATER FILM SET DESIGN

Investigation the production methods, dramatic theory and conventions, and scene design of various performance media since the popularization of the motion picture, and how it has influenced all entertainment design in the 20th and 21st centuries.

UNIT-3 GRAPHIC DESIGN AND TYPOGRAPHY FOR EXHIBIT DESIGN

Principles of layout for creating effective visual signage and explore the unique problems, technique, theory, and approaches of signage in film, theatre, and other forms of mediated exhibition. Introduction to the design applications for building signage.

UNIT-4 SET DESIGN AND CONCEPT WRAP

Introduction to the basic concepts, through theory and practice, of scene design in theatre, film, and other fine arts and entertainment media. Students will learn how to analyze scripts for proper scenery, how to conceptualize designs that will translate into actual sets, and develop visual thinking within the creative process.

<u>UNIT-5</u> STAGE DESIGN

Stage design process from inception to performance, script analysis, visual arts analysis, research skills, and the application of principles and elements of design. Understanding stage setting through language, color, and architectural analysis.

<u>References</u>

- 1. Time saver standards for building types, DeChiara and Callender, Mc Graw hill company
- 2. Neufert Architect's data, Bousmaha Baiche & Nicholas Walliman, Blackwell science ltd

SEMESTER-6

16IDT601		P	RO	FE	SSI	ONA	L PR	ACTICE			SEMEST	ER-VI
Marks	Internal	40		External 60 Total 100 Exam Hours								
Instruction Hou	ırs/Week	L	3	T	0	P/S	0			3		

COURSE OBJECTIVES:

- To develop understanding of the duties and liabilities of an Interior designer
- To obtain knowledge of bye-laws that relate to the building & the environment in the Indian context
- To learn and understand the Professional ethics and practice.
- To understand the code of conduct for interior Designers.
- To understand and undertake duties of an interior designer.
- To enable students to be ready for the professional world as practicing interior designers.

COURSE OUTCOME:

- 1. Ability to understand the professional standards
- 2. Ability to understand the tender documents and contract
- 3. Ability to understand and abide the duties of an interior designer.
- 4. Ability to understand and execute the code of conduct for an interior designer.
- 5. Ability to tender for Government projects and be able to estimate the cost of the same.

Ability to conduct various valuation for interior projects

Unit – I

Role of Interior Designer in society: Interior Design Profession as compared to other professions. Difference between profession and business. IIID and other organizations related to interior design profession.

Interior Designers approach to works, ways of getting works: types of works, works partly executed by other Interior Designers. : various precautions to be taken before taking up the work, conditions of engagement between interior Designer and client: commencement of work.

Unit – II

Issues of professional practice: Professional behavior, Ethics, Types of clients, Contracts, Tenders, Arbitration etc. as defined in terms of Interior Design field and current day context. Career opportunities, styles of interior design practice, relationship between client and professional, type of fees, process of fees negotiations, billing methods, tax liabilities, contracts – types of contracts – item rate, labour, lumpsum, cost plus percentage etc.

Unit – III

Interior Designer"s duties: drawings to be prepared: Interior Designer's relation with other parties connected with works such as client, contractor, sub contractors, consultants and authorities.

UNIT IV

IIID Code of professional conduct: scale of charges: units and mode of measurements, clerk of work and his duties, inspection of work, certificate of payment to contractor, bill of quantities, schedule of rates, tenders, public, limited and negotiated tender documents and allied formalities.

Preliminary knowledge of Consumer protection Act and other related acts on Interior Designers.

Unit - V

Types of offices for interior design practice: staff structure, filing of records, correspondence and drawings, maintenance of accounts, presentations in meetings, recording minutes of meeting.

Note: a report to be prepared by each student after visiting an interior designer soffice.

Knowledge of role of consultants and coordination between different consultants on a big project.

References

Indian Institute of Architects. H.B. Professional Practice, The Architects pub. Bombay.

Namavati. H. Roshan. Professional Practice. 8th ed, Lakshani Book Depot, Bombay, 2001.

Christine .M. Piotrowski, Professional practice for Interior Designers, 3rd edition, Wiley and sons, 2001.

Cindy Coleman, Interior Design Handbook practice, Mc Graw Hill professional, ist ed, 2001.

Ronald Veitch, Professional practice for Interior Designers, Peguis Publishers, Limited, 1987.

16IDT602			IN'	TEI	RIO	R LA	NDS	CAPE			SEMEST	ER-VI
Marks	Internal	40	40 External 60 Total 100 Exam Hours									
Instruction Hou	ırs/Week	L	3	T	0	P/S	0			3		

- To develop an understanding about the design of interior landscape
- To give special emphasis on the choice and care of plant materials used in the interior spaces.
- To study about the various landscaping elements and their application in interior spaces.
- To develop and understanding between outdoor and indoor landscape areas.]
- To have apt knowledge of the regional or vernacular plantation to use in particular regions and climates.
- To understand the various features using natural and manmade elements in landscape detailing.

COURSE OUTCOME:

- 1. Awareness of the role of landscape design with respect to macro scale of sustainability and ecology as well as in the micro scale of shaping of outdoor environments.
- 2. Knowledge about the elements of landscape design and their scope.
- 3. Sensitivity towards evolution of different garden and landscape design across time and context.
- 4. An understanding of landscape design with respect to site planning and different functional typologies of spaces
- 5. To use landscape according to the region, climate location and other detail.
- 6. To understand and provide physical requirements for plants to keep it in the living condition and maintenance of the same.

Unit – I

Introduction to landscape architecture. And role of landscaping design in the built environment. Types of natural elements – stones, rocks, pebbles, water forms, plants and vegetation. Elements of interior landscape.

Unit – II

Introduction to study of plants in relation to landscape design and interiors. Types of indoor plants, plant characteristics: i.e., biology, soil, moisture, light nutrient, atmospheric conditions, growing medium, pests & diseases. Botanical nomenclature, anatomy and physiology of plant growth. Indoor plants in Indian context. Market survey and costs.

Unit – III

Design with plants – Basic principles of designs. The physical attribute of plants and relation to design. Appearance, functional and visual effects of plants in landscape design and built environment. Selection and management of plant material in relation to the built environment. Design concepts related to use of sculpture, lightings, garden furniture, architectural feature and grouping them into meaningful composition s for visual and functional effects.

Unit – IV

Landscaping design parameters for various types of built forms- indoor and outdoor linkage to spaces. Landscaping of courtyards- residential and commercial forms. Indoor plants and their visual characteristics- color, texture, foliage.

<u>Unit-V</u>

Science of maintaining and growing greenery. Flowers- its colors, texture and its visual perception in various indoor spaces and science of flower arrangement. Automatic irrigation costing and installation of micro irrigation systems.

References

Laurie, Michael, An Introduction to Landscape. 2nd edition, Prentice Hall, New Jersey, 1986. Trivedi. P.Prathiba. Beautiful Shrubs. Indian council of Agricultural Research. New Delhi, 1990. Hacheat, Blan. Plant Design.

Gerald Robert Vizenor, A Guide to Interior Landscapes, Univ of Minnesota Press, 1990. Nelson Hammer and Mel Green, Interior Landscape Design, Mc Graw Hill, 1991.

16IDP611	PSYC]	HOL	OG	Υ (SPAC SCIEN		ND BEHAVI	[ORA]	Ĺ	SEMEST	ER-VI	
Marks	Internal	60		Ext	tern	al	90	Total	Total 150 Exam Hours				
Instruction Hou	ırs/Week	L	1	T	0	P/S	4	Credits				3	

- To Explain the role Wilhelm Wundt played in the development of psychology.
- To Understand the lack of ethnic and gender diversity in early psychology.
- To Explain the steps in the scientific method
- To Explore how the left and right hemisphere influence brain functioning.
- To Explain the difference between a psychiatrist and psychologist.
- To Examine the legal and ethical issues posed in the treatment of psychological disorders.

COURSE OUTCOME

- 1. Demonstrate an understanding of psychological theory regarding the relationship between physiology, cognition, and emotion.
- 2. Identify the lobes of the cortex and their major functions.
- 3. Differentiate between several measures of brain activity used in biopsychological research.
- 4. Identify the underlying causes of neurological and mental disorders.
- 5. Describe the action potential.
- 6. Describe how communication takes place between neurons.

Unit – I

Perception of space through understanding associative aspects relating to space. Understanding cognitive theories and Gestalt principles of psychology related in the field of space making to develop an understanding of place making.

Unit – II

Relationship of spatial elements like floor, column, wall, window, door, stair, roof, light, color, textures to the psychology and perception of space.

Unit – III

Kinesthetic – Understanding perception while in movement and space organization around such a phenomena.

Unit – IV

Analysis of human mind and his/her image of the world - social behavior patterns, traditional thinking and behavior and reflection of social world into physical environment.

Unit - V

Human being and his behavior in various public and private areas – change of patterns in various cultures. Human behavior in a group. Activities and its relationship with grouping of people Assignment: Space planning for public areas- restaurant, café, theatre lounge, waiting rooms, hotel foyer etc based on analysis of human behavior and perception of space.

References

Bryan Lawson, Language of Space, Architectural Press, 2001.

Yi- Fu Tuan, Steven Hoelscher, Space and Place : The perspective of experience, University of Minnesota Press, 2001.

Setha . M. Low, Denise Lawrence – Zunigias, Anthropology of Space and place : Locating Culture, Wiley – Blackwell publishers, 2003.

Irwin Altman & Erwin . H. Zube, Public spaces and places, (Human Behavior and environment), Springer link, 1989.

Roger Downs, David Stea, Kenneth . E. Boulding, Image and environment, Transaction Publishers, 2005.

16IDP612	WO	RKS	HC	P (PR	INTI	NG A	ND TEXTI	LES)		SEMEST	ER-VI
Marks	Internal	80		Ext	tern	al	120	Total	200		Exam Hours	3
Instruction Hou	ırs/Week	L	1	T	0	P/S	6			4		

- To understand the basic methods of furniture making with focus on hands
- on methods regarding workshop practices in wood, metal, plastic, textiles etc.to understand the usage of various materials as required with its properties.
- To understand the usage of engineered wood against the solid wood.
- To understand the fixing details of multiple materials and its interaction with each other.
- To be introduced to alternate materials
- To relate the various capacities into creative pursuits of design.
- To understand and acquire knowledge in interior workshops for hands on experience in build and construct design processes.

COURSE OUTCOME:

- 1. Understanding the scale of drawing to life size
- 2. To use tools related to wood glass and alternative substitution to wood.
- 3. To understand properties and usage of materials henceforth.
- 4. To understand modular furniture through engineered wood.
- 5. To understand the various capacities of hardware for the various materials.
- 6. To understand wood joints and its usage in various circumstances.
- 7. To develop a keen eye for compositions through workshops.
- 8. To use all materials in coordination with other materials and create an understanding of multi material compositions.

Unit – I

Development of textile design in different cultures from primitive art to contemporary designs. Criteria of design of the elements and principles of textile design. Analysis of a motif, developing repeat as a basic unit of design in textile printing.

Unit – II

Block printing – developing block, understanding the material used, colors, types and their mixing process, various color printing.

<u>Unit – III</u>

Screen printing – design evolution for wall hangings, preparing screen and understanding the technique, printing on paper and printing on fabric.

<u>References</u>

June Fish, Designing and printing textiles, Crowood press, 2005

R.W.Lee, Printing on Textiles by Direct and Transfer Techniques, Noyes Data Corporation, 1981 Fabrics: A guide for architects and Interior Designers, Marypaul Yates, Norton publishers, 2002.

Materials for Interior Environments, Corky Bingelli, John wiley and sons, 2007

16IDP613					S	EMI	NAR				SEMEST	ER-VI
Marks	Internal	40		Ext	ern	al	60	Total	100		Exam Hours	3
Instruction Hou	ırs/Week	L	0	T	0	P/S	4			2		

Some of the possible topics are –

- History of Interior design
- Theory of Interior space
- Interior Design language of various cultures
- Art and craft form and its relevance in interior spaces.
- Mass production of various interior elements
- Material techniques search to evolve alternatives
- Graphics and space transformation
- Color and light interaction to change space
- Eco friendly furniture
- User participation in Design
- Relation of an interior designer with other consultants.

Note: Each student is required to select one of the above topics and present a written paper and a seminar. This should be based on literature reviews, case studies, interviews, market surveys, if applicable.

16IDS621			IJ	NTE	ERI	OR D	ESIC	GN VI			SEMEST	ER-VI
Marks	Internal	160		Ext	tern	al	240	Total	400		Exam Hours	6
Instruction Hou	ırs/Week	L	2	T	0	P/S	10			7		

- **COURSE OBJECTIVE:**To create understanding of human built environment as a holistic, living entity from macro to micro scales,
- shaped by geographic and socio-cultural forces as well as by historic, political and economic factors, through study of and design within the context of rural settlements.
- To enable a comprehensive study of rural settlement and Interior design in order to understand them as exemplar of collective design that evolved through various parameters.
- To observe changes in the above, analyze their nature and causes for them
- Understanding a Design Programme and the Components of the Design Problem.
- To introduce buildings as consumers of resources for human needs and to enable responsible, creative addressing of this fact through design choices.
- To enable an understanding of interior design as integrating diverse functional concerns in a building through analysis and innovation.

COURSE OUTCOME:

- 1. Ability to collect, assimilate and integrate knowledge in a holistic manner.
- 2. Sensitivity towards the nature and values of unselfconscious and collective design aswellas the interconnectedness of human society and environment
- 3. Ability to observe and analyze changes in the above.
- 4. Ability to project future transformations and give possible/ appropriate ways to address issues, if any
- 5. Ability to collect, assimilate and integrate knowledge in a holistic manner.
- 6. Sensitivity towards the nature and values of unselfconscious and collective design as well as the interconnectedness of human society and environment.
- 7. Understanding a Design Programme and the Components of the Design Problem.
- 8. To introduce buildings as consumers of resources for human needs and to enable responsible, creative addressing of this fact through design choices.
- 9. To enable an understanding of interior design as integrating diverse functional concerns in a building through analysis and innovation.
- 10. Ability to critically understand and address issue of resources.
- 11. Ability to balance diverse aspects/concerns of buildings by making informed choices and innovative design in the context of buildings with intense or complex programmes.
- 12. Ability to apply knowledge intensively in realms such as sustainable built environment, services

The primary focus should be on –

- Interior Construction Detailing
- Way finding/signage and graphic identification
- Decorative Accessories
- Building Codes.
- Rendering (hand and computer generated).
- Custom designed furniture and cabinetry

- Specification Writing
- Cost estimating
- Selection of sustainable/green materials

The list of suggested topics to be covered as design problems:

- Hospitality Design, Retail Design, Healthcare Design and Office systems
- Urban Interiors Shopping malls, streets, Town squares, Fair grounds
- Interior Ports air ports, Bus stops, Railway stations, boats/ports
- Exhibition displays urban level and National level.
- Mobile units buses, cars, railway coaches etc.

Note: One major design in detail and two minor design/time problems should be given.

<u>References</u>

Karlen Mark, Space planning Basics, Van Nostrand Reinhold, New York, 1992.

Joseph D Chiara, Julius Panero, & Martin Zelnick, Time Saver standards for Interior Design & space planning, 2nd edition, Mc-Graw Hill professional, 2001.

Francis.D. Ching & Corky Bingelli, Interior Design Illustrared, 2nd edition, Wiley publishers, 2004.

Julius Panero & Martin Zelnick, Human Dimension & Interior Space : A source book of Design Reference standards, Watson – Guptill, 1979.

Maureen Mitton, Interior Design Visual Presentation: A Guide to Graphics, Models, and Presentation Techniques. John Wiley and Sons, 2003

Mark.W. Lin, Drawing and Designing with Confidence: A step-by-step guide, Wiley and Sons, 1993.

Robert Rengel, Shaping Interior Space, Fairchild Books & Visuals, 2002

Neufert Ernest, Architect"s Data, Granada pub. Ltd. London, 2000.

Maryrose McGowan & Kelsey Kruse, Interior Graphic Standards, Wiley and sons, 2004.

Mary Jo Peterson, Universal Kitchen and Bathroom Planning: Design That Adapts to People, McGraw-Hill Professional Publishing, 1998.

David Kent Ballast, Interior Construction & Detailing for Designers and Architects, Professional Publications, Inc.; Fourth Edition, 2007.

16IDS622	Ι	NTE	GR	AT	ED	PRO	JECT	WORK - I	II		SEMEST	ER-VI
Marks	Internal	60	External 90 Total 150 Exam Hours									
Instruction Hou	ırs/Week	L	0	T	0	P/S	6			3		

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- The student has to exhibit the capacities of an interior design in full ideology and should be ready for the professional challenges in future.
- The project understanding in totality will be expected from each student.
- It will help understand the importance of each subject in the previous years and its applications henceforth
- To understand the environmental impact assessment and to analyze the feasibility of the project in any given site.
- To check the feasibility of the project in the services.

COURSE OUTCOME:

- 1. Ability to integrate all the knowledge acquired so far and to exhibit the same through drawings and renderings.
- 2. Ability to integrate all aspects of the project to give a final report.
- 3. To be ready for large scale projects before the thesis.
- 4. To conduct research and to present the research with analysis of the feasibility of the project.
- 5. To understand the socio economic implication of the project in the given location.
- 6. To check the technical feasibility of eth project with parameters such as soil, water and other natural elements.
- 7. To assess the building for seismic zone and hence design according to the reading and understanding. The student has to submit a project feasibility report on the project done in the design studio by integrating the knowledge and skills acquired from all the subjects studied till date.

The report may consist of the following -

- Environmental impact assessment of the project following the standards and specifications
- Socio-economic appraisal of the project and the design considering factors such as behavioral aspects, security considerations, costs for different user groups, aesthetic preferences etc.
- Technical feasibility through execution and detailing of different spaces and elements of design, checking the feasibility of layout for service systems and specifications
- Costing of the project bill of quantities, schedule of rates, specifications etc. economic viability and financial viability
- Space planning aspects/ issues user activity spaces, access to physically challenged, fire safety, other services, green rating etc.

Note: The report has to presented for internal assessment

<u>References</u>

M.P. Birkett, An appraisal of project work as an educational tool within interior design education at tertiary level and its relation to professional practice, Royal College of Art, 1985.

Griff Boyle, Design Project Management, Ashgate Publishing; illustrated edition, 2003.

SEMESTER-7

16IDP711		P	RA	CT	IC	AL T	RAIN	ING		SEMESTER	-VII	
Marks	Internal	400	External 600 Total 1000 Exam Hours									
Instruction Hou	ırs/Week	L	0	T	0	P/S	0		its	15		

COURSE OBJECTIVE:

- To introduce the challenges of interior design practice.
- To enable overall understanding of different stages in real life interior design projects in practice.
- To create involvement in these stages as much as possible within the scope of a specific interior design practice –
- initiation of project,
- development of concepts into schematic drawings,
- approval process,
- presentations and working drawings,
- involvement in office discussions and client meetings,
- integrating structural and service concerns,
- estimation and tendering processes,
- site supervision and coordination in the construction process

COURSE OUTCOME:

- 1. An overall idea of the nuances of interior design practice.
- 2. An understanding about the total process that goes into the making of an interior in a building.
- 3. Maturity in using the experience gained from internship in the thesis project.
- 4. To have the ability to handle clients and translate the design requirements in to design projects.
- 5. To be able to experience hands on experience in the site during site visits and gain practical knowledge.
- 6. To be able to do professional detailing and to be able to produce drawings that are good for construction.

Every student must work in an interior designer's office as a full time trainee for a period of 20 calendar weeks (excluding viva – voce) from the date of commencement of training. The chief Interior Designer in the firm should have a minimum of 5 years of practical/ professional experience after his /her graduation.

The student should involve herself /himself in various aspects of work in an office like working drawings, presentation drawings, quantity estimation, site supervision etc. Students should understand professional practice methods of various interior designers, design process from client contacts to production documents, tender documents, production drawings for various works, site supervision etc. for various works. They should also know the Coordination of various agencies – client, members of design team, consultants, contractors, craftsmen and construction supervisors.

Detailed instructions regarding the training, the frequency of reporting to the department etc will be issued at the end of Seventh semester, which the student must strictly follow.

After completion of training, every student will have to submit a detailed report with a set of drawings on at least two projects in which he / she has worked during the twenty calendar weeks of the practical training period. This report will be evaluated at viva – voce by a jury consisting of one external, one internal and head of the department or his nominee. After submission of the report the department at its convenience will arrange for the conduct of the viva – voce examination.

16IDS721	FII	ELD S	STU	JDY	<i>k</i>	DOC	CUME	ENTATION		SEMESTER	-VII
Marks	Internal	200		Exam Hours	6						
Instruction Hou	ırs/Week	L	0	T	0	P/S	6		its	3	

The choice of the building shall be Contemporary, Heritage, Vernacular or even a settlement/small area in the city of training. This field study and documentation shall be submitted in the form of an architectural report with sketches, pictures and drawings and presented in the form of videos, presentation, slideshow etc covering the following aspects:

- History and Cultural Impact
- Style and Function
- Form and Spatial Studies
- Key Elements and Features
- Materials and Technology

SEMESTER-8

16IDS821				DE	SIG	N TE	IESIS	\		SEMESTER	-VIII		
Marks	Internal	ernal 400 External 600 Total 1000 Exam											
Instruction Hou	ırs/Week	/Week L 2 T 0 P/S							its	16			

COURSE OBJECTIVE:

- To ensure consolidation and application of the knowledge gained in preceding years of the programme in the context of a design project of the student's choice.
- To enable addressing of specific projects through key, identified issues inherent in the project or to enable development of thought processes in specific areas/aspects into a project.
- To facilitate development of ability to complete and handle projects independently as a precursor to professional life.
- To encompass the capacities to handle large scale projects and to be able to choose the scale of the project based on the knowledge acquired.
- To be given a chance to research the area that is of the students choice and to analyze the data and to be able to produce sensible design parameters based on the analysis.
- To be introduced to the professional practice nuances with respect to the design field.

COURSE OUTCOME:

- 1. Skill, knowledge and expertise in the domain of interior design.
- 2. Ability to handle a major interior design project independently through all stages
- 3. To be able to scale project size based on the parameters asserted by the futuristic clients.
- 4. To be able to design in relationship to the surroundings and also have a pragmatic and vernacular approach to the design chosen.
- 5. To be able to handle complex design problems
- 6. To introduce them into the professional world of design and detailing

Each student is expected to prepare a design thesis based on the preliminary work undertaken in the Interior design studio under an approved guide.

Thesis should reflect the knowledge gained from all the courses undertaken by the student in all the previous semesters.

The particulars of the schedule, content, presentation, format etc is to be decided by the department from time to time and shall be strictly followed.

At the end of the semester each student is expected to submit all original drawings prepared as per the department specifications. Three copies of the report in the specified format should be submitted to the department after the approval of the respective guides.

The department shall schedule the viva voce at its convenience only after the receipt of the thesis by the student. The performance sheet submitted by the guide and thesis committee should be the basis for allowing the student to appear for the final viva voce.

The end exam is to be conducted by a jury comprising of an external examiner. One internal examiner and head of the department or his nominee.

16IDS822	REV	ITAI	LIZ	AT	IOI	N OF	ART	S & CRAFT	'S	SEMESTER-	-VIII	
Marks	Internal	80	External 120 Total 200 Exam Hours									
Instruction Hou	ırs/Week	L	1	T	0	P/S	6		its	4		

Identification of private and public craft activity around the nation – various crafts and its perception in the society - design issues in transforming old craft forms into modern context by keeping its original spirits.

Assignment: Select one of the art/ craft form with the consultation of the faculty. Visit to the craft pockets. Document people, life, culture and craft and understand the materials, tools, technology, processes and forms. Suggest suitable changes in technology to improve the products so as to make it acceptable in today's context.

Note: The work will be periodically reviewed. The study has to be presented in the form of a report with illustrations and as a seminar for final assessment, along with the final product.